

GUIDES ET NORMES

Initier un traitement pharmacologique de la mucosite oropharyngée chez une personne recevant un traitement antinéoplasique

Annexes complémentaires du rapport en soutien
au protocole médical national et au modèle
d'ordonnance collective

Une production de l'Institut national
d'excellence en santé
et en services sociaux (INESSS)

Direction de l'évaluation et de la pertinence
des modes d'intervention en santé

Le présent document contient les annexes complémentaires au rapport *Initier un traitement pharmacologique de la mucosite oropharyngée chez une personne recevant un traitement antinéoplasique – Rapport en soutien au protocole médical national et au modèle d'ordonnance collective*.

Le contenu de cette publication a été rédigé et édité par l'INESSS.

Ces annexes et le rapport final sont accessibles en ligne dans la section [Publications](#) de notre site *Web*.

Renseignements

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Responsabilité

L'Institut rend accessibles les principales informations qui ont servi à la préparation du rapport *Initier un traitement pharmacologique de la mucosite oropharyngée chez une personne recevant un traitement antinéoplasique – Rapport en soutien au protocole médical national et au modèle d'ordonnance collective* aux lecteurs et lectrices qui désirent plus de détails sur sa démarche scientifique.

Ce document n'a pas fait l'objet d'une révision linguistique. Il ne reflète pas forcément les opinions des autres personnes consultées aux fins du présent dossier.

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ANNEXE A

Stratégie de repérage d'information scientifique

Tableau A-1 Bases de données bibliographiques

MEDLINE (Ovid)	
Date du repérage : mai 2021	
Limites : 2008 - ; anglais, français	
1	Mucositis/
2	((mucosa* ADJ (inflammation* OR injur* OR irritation*)) OR mucositides OR mucositis).ti,ab
3	1 OR 2
4	exp Algorithms/ OR exp Consensus/ OR exp Consensus Development Conference/ OR exp Consensus Development Conferences as Topic/ OR Clinical Conference.pt OR exp Clinical Protocols/ OR exp Guidelines as Topic/ OR exp Guideline/ OR Health Planning Guidelines/ OR exp Critical Pathways/ OR (guideline* OR guide line* OR CPG OR CPGs OR guidance OR practical guide* OR (best ADJ3 practice*) OR (evidence ADJ2 (base* OR report* OR syntheses* OR research OR practice* OR best)) OR consensus OR algorithm* OR (clinical ADJ2 (path OR paths OR pathway* OR protocol*)) OR ((critical OR clinical) ADJ2 (path OR paths OR pathway*)) OR recommendation* OR committee opinion* OR policy statement* OR position statement* OR practice parameter* OR practice pathway* OR practice protocol* OR ((standard OR standards) ADJ2 (care* OR practice*)) OR (gold ADJ2 standard*)).ti,ab,kw
5	3 AND 4
6	(Case Reports OR Comment OR Editorial OR Letter).pt OR (case report* OR comment* OR editorial* OR letter* OR replies OR reply).ti
7	5 NOT 6
8	Animals/ NOT (Humans/ and Animals/)
9	7 NOT 8

Embase (Ovid)	
Date du repérage : mai 2021	
Limites : 2008 - ; anglais, français	
1	Mucosa Inflammation/
2	((mucosa* ADJ (inflammation* OR injur* OR irritation*)) OR mucositides OR mucositis).ti,ab
3	1 OR 2
4	Algorithm/ OR Clinical Pathway/ OR Clinical Protocol/ OR Consensus/ OR Consensus Development/ OR Health Care Planning/ OR exp Practice Guideline/ OR (guideline* OR guide line* OR CPG OR CPGs OR guidance OR practical guide*).ti,ab,kw
5	3 AND 4
6	*Mucosa Inflammation/ OR Mucosa Inflammation/di,dt,pc
7	((best ADJ3 practice*) OR (evidence ADJ2 (base* OR report* OR syntheses* OR research OR practice* OR best)) OR consensus OR algorithm* OR (clinical ADJ2 (path OR paths OR pathway* OR protocol*)) OR ((critical OR clinical) ADJ2 (path OR paths OR pathway*)) OR recommendation* OR committee opinion* OR policy statement* OR position statement* OR practice parameter* OR practice pathway* OR practice protocol* OR ((standard OR standards) ADJ2 (care* OR practice*)) OR (gold ADJ2 standard*)).ti,ab,kw
8	(2 OR 6) AND 7
9	5 OR 8
10	Case Report/ OR Editorial/ OR Letter/ OR (case report* OR comment* OR editorial* OR letter* OR replies OR reply).ti
11	9 NOT 10
12	Nonhuman/ NOT (Human/ AND Nonhuman/)
13	11 NOT 12
14	Conference Abstract.pt
15	13 NOT 14

EBM Reviews (Ovid) : Cochrane Database of Systematic Reviews; Health Technology Assessment; NHS Economic Evaluation Database Date du repérage : mai 2021 Limites : 2008- ; anglais, français	
1	((mucosa* ADJ (inflammation* OR injur* OR irritation*)) OR mucositides OR mucositis).ti,ab,sh

Sites Web et autres sources

Date de la consultation : 10 et 11 mai 2021

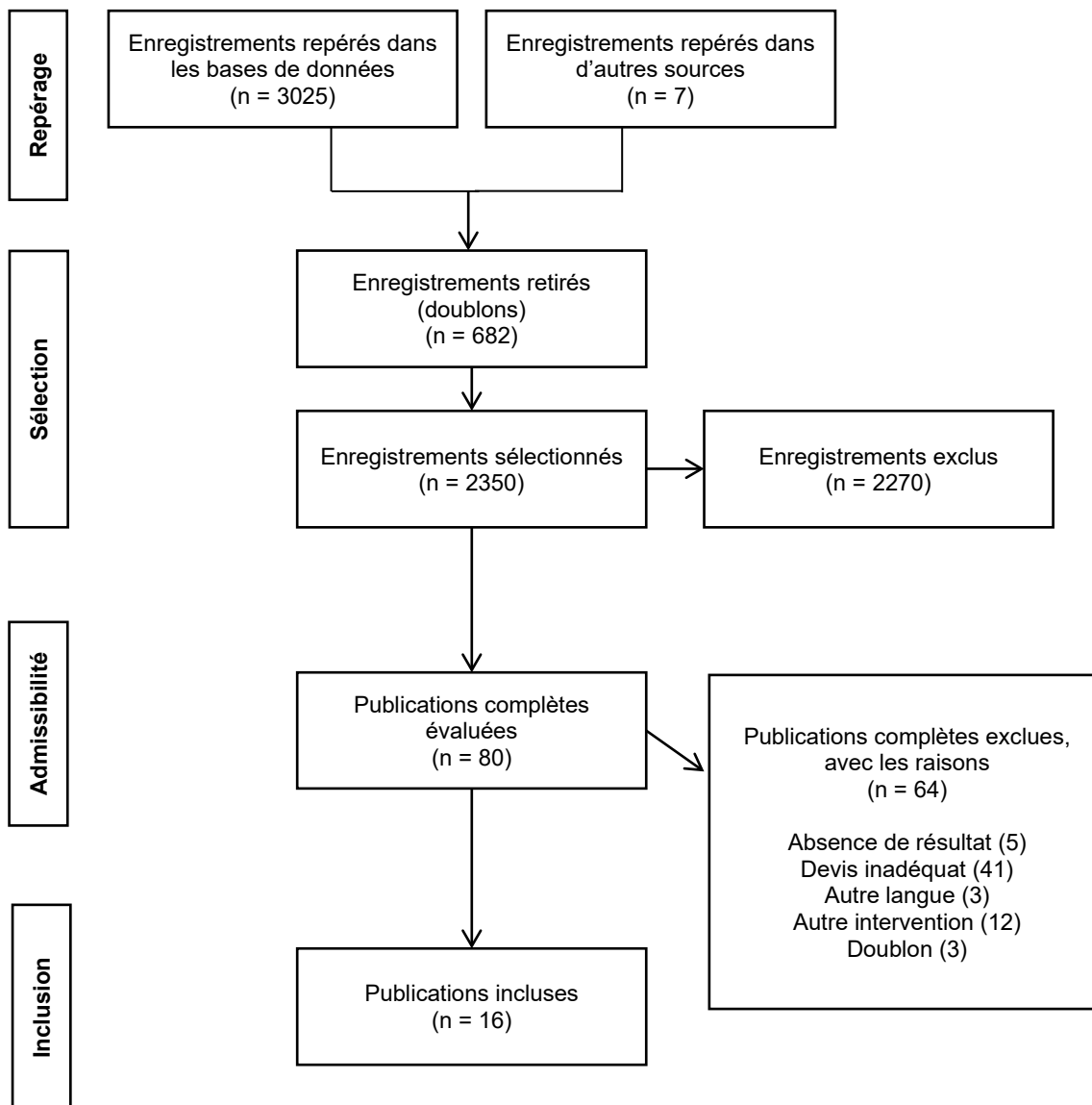
Limites : 2008 - ; anglais et français; guides de bonne pratique clinique, consensus d'experts, conférences consensuelles, lignes directrices ou tout autre document présentant des recommandations cliniques.

- Agency for Healthcare Research and Quality (AHRQ)
- Agence canadienne des médicaments et des technologies (ACMTS/CADTH)
- Australian Clinical Practice Guidelines (NHMRC)
- BCGuidelines.ca
- Campbell Collaboration Library of Systematic Reviews
- ECRI Guidelines Trust
- Guidelines International Network (G-I-N)
- Haute Autorité de Santé (HAS)
- Health Quality Ontario (HQO)
- Infobanque AMC (Association médicale canadienne/Canadian Medical Association)
- Institute for Clinical Evaluative Sciences
- International Network of Agencies for Health Technology Assessment (INAHTA)
- New Zealand Guidelines Group (NZGG)
- NHS National Institute for Health and Care Excellence (NICE)
- Scottish Intercollegiate Guidelines Network (SIGN)
- Accelerating Change Transformation Team (ACTT) (anciennement Toward Optimized Practice (TOP))
- World Health Organization (WHO)

ANNEXE B

Sélection des études

Figure B-1 Diagramme de flux : Mucosite buccale



ANNEXE C

Listes et caractéristiques des documents retenus

Tableau C-1 Caractéristiques du GPC ESMO 2015 [ESMO, 2015]

Type	Guide de pratique clinique
Organismes	ESMO, European Society for Medical Oncology
Auteurs	Peterson DE, Boers-Doets CB, Bensadoun RJ, Herrstedt J.
Pays	Suisse
Titre	<i>Management of oral and gastrointestinal mucosal injury: ESMO Clinical Practice Guidelines for diagnosis, treatment, and follow-up</i>
Année	2015
Objectif	Diagnosis, treatment, and follow-up of oral and gastrointestinal mucosal injury
Période de la recherche documentaire	Aucune mention
Sources d'information	Aucune mention
Conflit d'intérêts	Les auteurs n'ont déclaré aucun conflit d'intérêts.

Tableau C-2 Caractéristiques du GPC MASCC/ISOO 2020 [MASCC/ISOO, 2020]

Type	Guide de pratique clinique
Organisme	MASCC/ISOO, Multinational Association of Supportive Care in Cancer and International Society of Oral Oncology
Auteurs	Elad S, Cheng KK, Lalla RV, Yarom N, Hong C, Logan RM, et al.
Pays	International
Titre	<i>MASCC/ISOO clinical practice guidelines for the management of mucositis secondary to cancer therapy</i>
Année	2020
Objectif	The goal of this endeavor is to provide clinicians with a set of interventions for mucositis with strong evidence to support or refute their use in certain clinical circumstances
Période de la recherche documentaire	1 ^{er} janvier 2011 au 30 juin 2016
Sources d'information	PubMed (MEDLINE)
Conflit d'intérêts	Les auteurs ont déclaré des conflits d'intérêts. Voir p.8 du GPC

Tableau C-3 Caractéristiques du GPC NCCN 2008 [NCCN, 2008]

Type	Guide de pratique clinique
Organismes	NCCN, National Comprehensive Cancer Network
Auteurs	Bensinger W, Schubert M, Ang KK, Brizel D, Brown E, Eilers JG, et al.
Pays	États-Unis
Titre	<i>NCCN Task Force Report: Prevention and management of mucositis in cancer care</i>
Année	2008
Objectif	This report integrates expert judgment with a review of key literature on risk assessment, prevention, and treatment strategies, and provides recommendations for the overall management of OM.
Période de la recherche documentaire	Aucune mention
Sources d'information	PubMed
Conflit d'intérêts	Aucune mention

Tableau C-4 Caractéristiques du GPC KCE 2012 [KCE, 2012]

Type	Guide de pratique clinique
Organismes	KCE, Centre fédéral d'expertise des soins de santé
Auteurs	Verleye L, van de Wetering F, Heus P, Scholten R, Vlayen J.
Pays	Belgique
Titre	<i>Thérapies de soutien en cas de cancer – Partie 2 : prévention et traitement des effets indésirables liés à la chimiothérapie et la radiothérapie</i>
Année	2012
Objectif	Le présent rapport a pour objectif de formuler, sur la base de données probantes, des recommandations relatives à la prévention et au traitement des effets indésirables de la chimiothérapie et/ou de la radiothérapie.
Période de la recherche documentaire	1980 to 2012
Sources d'information	MEDLINE, Embase, Cochrane Database of Systematic Reviews, DARE, HTA database
Conflit d'intérêts	Les auteurs ont déclaré des conflits d'intérêts. Voir p.6 du GPC

Tableau C-5 Caractéristiques du GPC ONS 2019 [ONS, 2019]

Type	Guide de pratique clinique
Organismes	ONS, Oncology Nursing Society
Auteurs	Eilers JG, Asakura Y, Blecher CS, Burgoon D, Chiffelle R, Ciccolini K, et al.
Pays	États-Unis
Titre	<i>Mucositis</i>
Année	2019
Objectif	Evidence-based guidelines and interventions for quality patient care and teaching
Période de la recherche documentaire	Aucune mention
Sources d'information	Aucune mention
Conflit d'intérêts	Aucune mention

Tableau C-6 Caractéristiques du GPC De Sanctis 2016 [De Sanctis et al., 2016]

Type	Guide de pratique clinique
Organismes	Aucune
Auteurs	De Sanctis V, Bossi P, Sanguineti G, Trippa F, Ferrari D, Bacigalupo A, et al.
Pays	Italie
Titre	<i>Mucositis in head and neck cancer patients treated with radiotherapy and systemic therapies: Literature review and consensus statements.</i>
Année	2016
Objectif	the aim of reaching consensus on prophylaxis and management of mucositis.
Période de la recherche documentaire	De 1992 à mars 2013
Sources d'information	MEDLINE
Conflit d'intérêts	Les auteurs ont déclaré des conflits d'intérêts. Voir p.14 du GPC

Tableau C-7 Caractéristiques du GPC CCLG/PONF 2010 [CCLG/PONF, 2010]

Type	Guide de pratique clinique
Organismes	CCLG/ PONF, Children's Cancer and Leukaemia Group/Paediatric Oncology Nurses Forum's Mouth Care Group
Auteurs	Glenny AM, Gibson F, Auld E, Coulson S, Clarkson JE, Craig JV, et al.
Pays	Royaume-Uni
Titre	<i>The development of evidence-based guidelines on mouth care for children, teenagers and young adults treated for cancer</i>
Année	2010
Objectif	The careful oral management of children treated for cancer can improve the quality of life during treatment
Période de la recherche documentaire	Aucune mention
Sources d'information	MEDLINE
Conflit d'intérêts	Les auteurs n'ont déclaré aucun conflit d'intérêt.

Tableau C-8 Caractéristiques du GPC Mirabile 2016 [Mirabile et al., 2016]

Type	Guide de pratique clinique
Organismes	Aucune
Auteurs	Mirabile A, Airolidi M, Ripamonti C, Bolner A, Murphy B, Russi E, et al.
Pays	Italie
Titre	<i>Pain management in head and neck cancer patients undergoing chemo-radiotherapy: Clinical practical recommendations</i>
Année	2016
Objectif	Treatment outcome is the most reported endpoint in the available studies based on head and neck cancer patients, and only a minority of the reports consider specifically pain due to the oncological management and pharmacological strategy to address it.
Période de la recherche documentaire	De 1994 à mars 2013
Sources d'information	Embase
Conflit d'intérêts	Les auteurs n'ont déclaré aucun conflit d'intérêt.

Tableau C-9 Caractéristiques du GPC Arriola 2015 [Arriola et al., 2015]

Type	Guide de pratique clinique
Organismes	Aucune
Auteurs	Arriola E, Reguart N, Artal A, Cobo M, Garcia-Campelo R, Esteban E, et al.
Pays	Espagne
Titre	<i>Management of the adverse events of afatinib: A consensus of the recommendations of the Spanish expert panel</i>
Année	2015
Objectif	Here we provide practical recommendations for the prophylaxis and treatment of the most common of these.
Période de la recherche documentaire	Aucune mention
Sources d'information	Aucune mention
Conflit d'intérêts	Les auteurs ont déclaré des conflits d'intérêts. Voir p.9 du GPC

Tableau C-10 Caractéristiques du GPC Califano 2015 [Califano et al., 2015]

Type	Guide de pratique clinique
Organismes	Aucune
Auteurs	Califano R, Tariq N, Compton S, Fitzgerald DA, Harwood CA, Lal R, et al.
Pays	Royaume-Uni
Titre	<i>Expert consensus on the management of adverse events from EGFR tyrosine kinase inhibitors in the UK</i>
Année	2015
Objectif	These guidelines detail supportive measures, treatment delays and dose reductions for EGFR-TKIs.
Période de la recherche documentaire	Aucune mention
Sources d'information	Aucune mention
Conflit d'intérêts	Les auteurs ont déclaré des conflits d'intérêts. Voir p.12 du GPC

Tableau C-11 Caractéristiques du GPC MASCC/STSG 2011 [MASCC/STSG, 2011]

Type	Guide de pratique clinique
Organismes	MASCC Skin Toxicity Study Group
Auteurs	Lacouture ME, Anadkat MJ, Bensadoun RJ, Bryce J, Chan A, Epstein JB, et al.
Pays	États-Unis
Titre	<i>Clinical practice guidelines for the prevention and treatment of EGFR inhibitor-associated dermatological toxicities</i>
Année	2011
Objectif	Although the side effect profile may be primarily dermatological, toxicities result in significant physical and emotional discomfort, thus it is critical to maximize supportive measures.
Période de la recherche documentaire	Avant novembre 2010
Sources d'information	MEDLINE, Embase
Conflit d'intérêts	Les auteurs ont déclaré des conflits d'intérêts. Voir p.14 du GPC

Tableau C-12 Caractéristiques du Alberta Health Services 2019 [AHS, 2019]

Type	Document contextuel canadien
Organismes	Alberta Health Services
Province	Alberta
Titre	<i>Oral care management tips for healthcare professionals: Mucositis, candidiasis, xerostomia</i>
Année	2019

Tableau C-13 Caractéristiques du ROHPPA 2017 [ROHPPA, 2017]

Type	Document contextuel canadien
Organismes	ROHPPA, Réseau d'oncologie et d'hématologie pédiatrique des provinces de l'Atlantique
Province	Nouveau-Brunswick, Nouvelle-Écosse, Île-du-Prince-Édouard et Terre-Neuve-Labrador
Titre	<i>Guidelines for the prevention and management of mucositis in children receiving cancer therapy</i>
Année	2017

Tableau C-14 Caractéristiques du BC Cancer 2019 [BCC, 2019]

Type	Document contextuel canadien
Organismes	BC Cancer
Province	Colombie Britannique
Titre	<i>Symptom management guidelines: Oral mucositis</i>
Année	2019

Tableau C-15 Caractéristiques du Cancer Care Ontario 2012 [CCO, 2012]

Type	Document contextuel canadien
Organismes	Cancer Care Ontario
Province	Ontario
Titre	<i>Symptom management guide-to-practice: Oral care</i>
Année	2012

Tableau C-16 Caractéristiques du GEOQ 2017 [GEOQ, 2017]

Type	Document contextuel canadien
Organismes	GEOQ, Groupe d'étude en oncologie du Québec
Province	Québec
Titre	<i>Les rince-bouches pour la prévention et le traitement de la mucosite induite par la chimiothérapie et les thérapies ciblées</i>
Année	2017

Listes et caractéristiques des documents exclus

Tableau C-17 Documents exclus

Auteur, Année	Titre	Raison d'exclusion
Ariyawardana <i>et al.</i> , 2019	Systematic review of anti-inflammatory agents for the management of oral mucositis in cancer patients and clinical practice guidelines	Devis inadéquat
Barasch et Epstein, 2011	Management of cancer therapy-induced oral mucositis	Doublon
Blakaj <i>et al.</i> , 2019	Oral mucositis in head and neck cancer: Evidence-based management and review of clinical trial data	Devis inadéquat
Blanchard <i>et al.</i> , 2014	Management of somatic pain induced by head and neck cancer treatment: Pain following radiation therapy and chemotherapy	Aucun résultat d'intérêt
Bowen <i>et al.</i> , 2019	Systematic review of agents for the management of cancer treatment-related gastrointestinal mucositis and clinical practice guidelines	Autre intervention
Brown et Gupta, 2020	Management of cancer therapy-associated oral mucositis	Devis inadéquat
CADTH, 2013	Oral lidocaine for reflux or mucositis: Clinical evidence and guidelines	Devis inadéquat
Carneiro-Neto <i>et al.</i> , 2017	Protocols for management of oral complications of chemotherapy and/or radiotherapy for oral cancer: Systematic review and meta-analysis current	Devis inadéquat
Carvalho <i>et al.</i> , 2018	Guide for health professionals addressing oral care for individuals in oncological treatment based on scientific evidence	Autre intervention
Chaitanya <i>et al.</i> , 2019	A meta-analysis on the efficacy of zinc in oral mucositis during cancer chemo and/or radiotherapy-an evidence-based approach	Devis inadéquat
Clarkson <i>et al.</i> , 2010	Interventions for treating oral mucositis for patients with cancer receiving treatment	Devis inadéquat
Correa <i>et al.</i> , 2020	Systematic review of oral cryotherapy for the management of oral mucositis in cancer patients and clinical practice guidelines	Devis inadéquat
Davy et Heathcote, 2021	Systematic review of interventions to mitigate radiotherapy-induced oral mucositis in head and neck cancer patients	Devis inadéquat
Eilers <i>et al.</i> , 2014	Evidence-based interventions for cancer treatment-related mucositis: putting evidence into practice	Doublon

Auteur, Année	Titre	Raison d'exclusion
Eilers et Million, 2011	Clinical update: Prevention and management of oral mucositis in patients with cancer	Devis inadéquat
El Bousaadani <i>et al.</i> , 2016	Actualités de la prévention et du traitement des mucites orales chez les enfants cancéreux : recommandations pratiques	Autre intervention
El Bousaadani <i>et al.</i> , 2015	Prise en charge des mucites orales chez les enfants cancéreux : recommandations de bonnes pratiques en 2015	Autre intervention
Farrington <i>et al.</i> , 2013	Evidence-based oral care for oral mucositis	Aucun résultat d'intérêt
Farrington <i>et al.</i> , 2010	Assessment of oral mucositis in adult and pediatric oncology patients: an evidence-based approach	Aucun résultat d'intérêt
Fogh et Yom, 2014	Symptom management during the radiation oncology treatment course: A practical guide for the oncology clinician	Devis inadéquat
Gkantaifi <i>et al.</i> , 2021	Radiation-induced oral mucositis in head and neck cancer patients. Five years literature review	Devis inadéquat
Harris <i>et al.</i> , 2008	Putting evidence into practice: Evidence-based interventions for the management of oral mucositis	Doublon
Hensley <i>et al.</i> , 2009	American Society of Clinical Oncology 2008 clinical practice guideline update: Use of chemotherapy and radiation therapy protectants	Autre intervention
Herrero Fernandez <i>et al.</i> , 2017	[<i>Management protocol for mucositis in patients with cancer</i>]	Autre langue
Hong <i>et al.</i> , 2019	Systematic review of basic oral care for the management of oral mucositis in cancer patients and clinical practice guidelines	Devis inadéquat
Jensen <i>et al.</i> , 2013	Systematic review of miscellaneous agents for the management of oral mucositis in cancer patients	Devis inadéquat
Jones et Rankin, 2012	Management of the oral sequelae of cancer therapy	Devis inadéquat
Kuo <i>et al.</i> , 2018	Meta-analysis of randomized controlled trials of the efficacy of propolis mouthwash in cancer therapy-induced oral mucositis	Devis inadéquat
Lalla, 2020	Evidence-based management of oral mucositis	Devis inadéquat
Lalla <i>et al.</i> , 2014	Chemotherapy or radiation-induced oral mucositis	Devis inadéquat
Loeffen <i>et al.</i> , 2015	Development of clinical practice guidelines for supportive care in childhood cancer—prioritization of topics using a Delphi approach.	Devis inadéquat
Logan <i>et al.</i> , 2020	Systematic review of growth factors and cytokines for the management of oral mucositis in cancer patients and clinical practice guidelines	Devis inadéquat
MacDonald et Visintini, 2018	Benzydamine for the treatment of oropharyngeal mucositis from radiation therapy: A review of clinical effectiveness and guidelines	Devis inadéquat
Manoharan <i>et al.</i> , 2020	Effectiveness of mouth rinses in prevention and treatment of radiation induced mucositis: A systematic review	Devis inadéquat
Mazhari <i>et al.</i> , 2019	Management of oral mucositis in pediatric patients receiving cancer therapy: A systematic review and meta-analysis	Devis inadéquat
McGuire <i>et al.</i> , 2013	Systematic review of basic oral care for the management of oral mucositis in cancer patients	Devis inadéquat
Nair <i>et al.</i> , 2016	Clinical effectiveness of aloe vera in the management of oral mucosal diseases – A systematic review	Devis inadéquat

Auteur, Année	Titre	Raison d'exclusion
Nicolatou-Galitis <i>et al.</i> , 2013	Systematic review of amifostine for the management of oral mucositis in cancer patients	Devis inadéquat
Potting <i>et al.</i> , 2009	A review of quality assessment of the methodology used in guidelines and systematic reviews on oral mucositis	Devis inadéquat
Quinn <i>et al.</i> , 2008	Guidelines for the assessment of oral mucositis in adult chemotherapy, radiotherapy and haematopoietic stem cell transplant patients	Aucun résultat d'intérêt
Qutob <i>et al.</i> , 2013	Prevention of oral mucositis in children receiving cancer therapy: A systematic review and evidence-based analysis	Devis inadéquat
Raber-Durlacher <i>et al.</i> , 2013	Systematic review of cytokines and growth factors for the management of oral mucositis in cancer patients	Devis inadéquat
Radvansky <i>et al.</i> , 2013	Prevention and management of radiation-induced dermatitis, mucositis, and xerostomia	Devis inadéquat
Ruiz-Esquide <i>et al.</i> , 2011	[<i>Treatment and prevention of cancer treatment related oral mucositis</i>]	Autre langue
Salarvand <i>et al.</i> , 2017	A review of the quality of extant clinical practice guidelines in cancer therapy-induced mucositis	Devis inadéquat
Sant Ana <i>et al.</i> , 2020	Topical treatment of oral mucositis in cancer patients: A systematic review of randomized clinical trials	Devis inadéquat
Satheeshkumar et Mohan, 2018	Prevention and treatment of oral mucositis pain following cancer therapy	Devis inadéquat
Saunders <i>et al.</i> , 2020	Systematic review of antimicrobials, mucosal coating agents, anesthetics, and analgesics for the management of oral mucositis in cancer patients and clinical practice guidelines	Devis inadéquat
Sayles <i>et al.</i> , 2016	Oral glutamine in preventing treatment-related mucositis in adult patients with cancer: A systematic review	Devis inadéquat
Seelisch <i>et al.</i> , 2019	Identifying clinical practice guidelines for the supportive care of children with cancer: A report from the Children's Oncology Group	Autre intervention
Seiler <i>et al.</i> , 2014	Adverse event management of oral mucositis in patients with breast cancer	Devis inadéquat
Song <i>et al.</i> , 2012	Systematic review and meta-analysis on the use of honey to protect from the effects of radiation-induced oral mucositis	Devis inadéquat
Staves et Ramchandran, 2017	Prevention and treatment options for mTOR inhibitor-associated stomatitis	Devis inadéquat
Steinmann <i>et al.</i> , 2021	Nursing procedures for the prevention and treatment of mucositis induced by cancer therapies: Clinical practice guideline based on an interdisciplinary consensus process and a systematic literature search	Autre intervention
Sung <i>et al.</i> , 2017	Guideline for the prevention of oral and oropharyngeal mucositis in children receiving treatment for cancer or undergoing haematopoietic stem cell transplantation	Autre intervention
Tomlinson <i>et al.</i> , 2008	Challenges of mucositis assessment in children: Expert opinion	Aucun résultat d'intérêt
Vokurka <i>et al.</i> , 2021	[<i>Oral cavity complications in oncological and hemato-oncological patients</i>]	Autre langue
Yarom <i>et al.</i> , 2021	Correction to: Systematic review of natural and miscellaneous agents, for the management of oral mucositis in cancer patients and clinical practice guidelines – Part 1: Vitamins, minerals and nutritional supplements (Supportive Care in Cancer 2019;27(10):3997-4010)	Autre intervention

Auteur, Année	Titre	Raison d'exclusion
Yarom <i>et al.</i> , 2020	Systematic review of natural and miscellaneous agents, for the management of oral mucositis in cancer patients and clinical practice guidelines – Part 2: Honey, herbal compounds, saliva stimulants, probiotics, and miscellaneous agents	Autre intervention
Yarom <i>et al.</i> , 2019	Systematic review of natural and miscellaneous agents for the management of oral mucositis in cancer patients and clinical practice guidelines - Part 1: Vitamins, minerals, and nutritional supplements	Devis inadéquat
Yarom <i>et al.</i> , 2013	Systematic review of natural agents for the management of oral mucositis in cancer patients	Autre intervention
Zadik <i>et al.</i> , 2019	Systematic review of photobiomodulation for the management of oral mucositis in cancer patients and clinical practice guidelines	Devis inadéquat
Zhu <i>et al.</i> , 2016	Asian expert recommendation on management of skin and mucosal effects of radiation, with or without the addition of cetuximab or chemotherapy, in treatment of head and neck squamous cell carcinoma.	Autre intervention
Zur, 2012	Oral mucositis: Etiology, and clinical and pharmaceutical management	Devis inadéquat

ANNEXE D

Résultats de l'évaluation de la qualité méthodologique des études retenues

Tableau D-1 Évaluation des guides de pratique clinique sélectionnés sur la mucosite selon la grille AGREE II détaillée

	<i>ESMO 2015</i>		<i>MASCC/ISOO 2020</i>		<i>NCCN 2008</i>		<i>KCE 2012</i>		<i>ONS 2019</i>		<i>DE SANCTIS 2016</i>	
Évaluateurs	1	2	1	2	1	2	1	2	1	2	1	2
1. Le ou les objectifs de la RPC sont décrits explicitement.	7	7	7	7	7	7	7	7	7	6	7	7
2. La ou les questions de santé couvertes par la RPC sont décrites explicitement.	7	6	7	7	7	7	7	6	4	4	7	6
3. La population à laquelle la RPC doit s'appliquer est décrite explicitement.	5	5	7	6	6	6	6	5	3	4	7	6
4. Le groupe de travail ayant élaboré la RPC inclut des représentants de tous les groupes professionnels concernés.	4	4	6	6	6	7	4	6	3	2	6	5
5. Les opinions et les préférences de la population cible ont été identifiées.	1	1	1	1	1	1	6	6	1	1	1	1
6. Les utilisateurs cibles de la RPC sont clairement définis.	5	4	5	5	7	7	7	7	5	4	7	6
7. Des méthodes systématiques ont été utilisées pour rechercher les preuves scientifiques.	1	1	7	7	1	1	7	7	7	7	6	5
8. Les critères de sélection des preuves sont clairement décrits.	1	1	7	7	1	1	5	5	5	6	5	4
9. Les forces et les limites des preuves scientifiques sont clairement définies.	3	2	7	7	1	2	7	5	1	1	1	2
10. Les méthodes utilisées pour formuler les recommandations sont clairement décrites.	1	1	6	4	4	3	7	5	1	1	5	5
11. Les bénéfices, les effets secondaires et les risques en termes de santé ont été pris en considération dans la formulation des recommandations.	1	3	6	5	3	3	7	6	1	3	5	4

	<i>ESMO 2015</i>		<i>MASCC/ISOO 2020</i>		<i>NCCN 2008</i>		<i>KCE 2012</i>		<i>ONS 2019</i>		<i>DE SANCTIS 2016</i>	
Évaluateurs	1	2	1	2	1	2	1	2	1	2	1	2
12. Il y a un lien explicite entre les recommandations et les preuves scientifiques sur lesquelles elles reposent.	2	4	7	7	4	3	7	7	1	2	2	2
13. La RPC a été revue par des experts externes avant sa publication.	2	2	1	4	1	1	4	5	1	1	5	5
14. Une procédure d'actualisation de la RPC est décrite.	4	2	2	1	1	1	1	1	1	1	1	1
15. Les recommandations sont précises et sans ambiguïté.	4	4	7	7	7	6	7	7	5	5	7	6
16. Les différentes options de prise en charge de l'état ou du problème de santé sont clairement présentées.	7	6	7	7	7	6	7	7	5	4	7	6
17. Les recommandations clés sont facilement identifiables.	4	6	7	7	4	5	7	7	7	7	7	7
18. La RPC décrit les éléments facilitant son application et les obstacles.	1	1	1	1	1	1	1	1	1	1	1	1
19. La RPC offre des conseils et/ou des outils sur les façons de mettre les recommandations en pratique.	1	2	1	1	3	1	1	1	5	4	1	1
20. Les répercussions potentielles sur les ressources de l'application des recommandations ont été examinées.	1	1	1	1	1	1	1	1	1	1	1	1
21. La RPC propose des critères de suivi et de vérification.	1	1	1	1	1	1	1	1	1	1	1	1
22. Le point de vue des organismes de financement n'a pas influencé le contenu de la RPC.	5	6	4	5	7	6	4	3	1	3	1	1
23. Les intérêts divergents des membres du groupe ayant élaboré la RPC ont été pris en charge et documentés.	4	3	7	5	6	5	4	3	1	1	4	4
Score total (/161)	72	73	112	109	87	82	115	109	68	70	95	87
Recommandation de l'utilisation du guide	Oui		Oui		Oui		Oui		Oui		Oui	

Tableau D-1 Évaluation des guides de pratique clinique sélectionnés sur la mucosite selon la grille AGREE II détaillée

	<i>MIRABILE 2016</i>		<i>CCLG/PONF 2010</i>		<i>ARRIOLA 2015</i>		<i>CALIFANO 2015</i>		<i>MASCC/STSG 2011</i>	
Évaluateurs	1	2	1	2	1	2	1	2	1	2
1. Le ou les objectifs de la RPC sont décrits explicitement.	7	7	7	7	7	7	7	7	7	7
2. La ou les questions de santé couvertes par la RPC sont décrites explicitement.	7	6	7	5	7	7	7	6	7	6
3. La population à laquelle la RPC doit s'appliquer est décrite explicitement.	4	5	5	5	7	5	6	5	4	5
4. Le groupe de travail ayant élaboré la RPC inclut des représentants de tous les groupes professionnels concernés.	5	5	1	2	5	4	4	4	5	5
5. Les opinions et les préférences de la population cible ont été identifiées.	1	1	4	5	1	1	1	1	1	1
6. Les utilisateurs cibles de la RPC sont clairement définis.	6	6	7	7	7	7	5	7	5	5
7. Des méthodes systématiques ont été utilisées pour rechercher les preuves scientifiques.	6	5	1	2	1	1	1	1	4	4
8. Les critères de sélection des preuves sont clairement décrits.	2	3	6	5	1	1	1	1	2	3
9. Les forces et les limites des preuves scientifiques sont clairement définies.	1	2	2	3	1	3	1	2	3	4
10. Les méthodes utilisées pour formuler les recommandations sont clairement décrites.	7	5	7	5	1	1	1	2	1	1
11. Les bénéfices, les effets secondaires et les risques en termes de santé ont été pris en considération dans la formulation des recommandations.	1	3	6	5	5	4	3	3	5	4
12. Il y a un lien explicite entre les recommandations et les preuves scientifiques sur lesquelles elles reposent.	1	2	5	4	4	3	3	4	5	3
13. La RPC a été revue par des experts externes avant sa publication.	2	2	4	4	1	1	1	1	1	1
14. Une procédure d'actualisation de la RPC est décrite.	1	1	1	1	1	1	1	1	1	1
15. Les recommandations sont précises et sans ambiguïté.	7	6	7	6	7	5	7	5	7	5

	MIRABILE 2016		CCLG/PONF 2010		ARRIOLA 2015		CALIFANO 2015		MASCC/STSG 2011	
Évaluateurs	1	2	1	2	1	2	1	2	1	2
16. Les différentes options de prise en charge de l'état ou du problème de santé sont clairement présentées.	7	6	7	7	7	7	7	6	7	5
17. Les recommandations clés sont facilement identifiables.	7	7	4	5	4	5	7	7	4	4
18. La RPC décrit les éléments facilitant son application et les obstacles.	1	1	1	1	1	1	1	1	1	1
19. La RPC offre des conseils et/ou des outils sur les façons de mettre les recommandations en pratique.	1	1	1	1	1	1	1	1	1	1
20. Les répercussions potentielles sur les ressources de l'application des recommandations ont été examinées.	1	1	1	1	1	1	1	1	1	1
21. La RPC propose des critères de suivi et de vérification.	1	1	1	1	1	1	1	1	1	1
22. Le point de vue des organismes de financement n'a pas influencé le contenu de la RPC.	1	1	4	4	4	3	6	7	6	6
23. Les intérêts divergents des membres du groupe ayant élaboré la RPC ont été pris en charge et documentés.	3	4	3	2	4	4	4	4	4	4
Score total (/161)	80	81	92	88	79	74	77	78	83	78
Recommandation de l'utilisation du guide	Oui		Oui		Oui		Oui		Oui	

Tableau D-2 Évaluation des guides de pratique clinique sur la mucosite, sommaire de la grille AGREE II

	<i>ESMO 2015</i>				<i>MASCC/ISOO 2020</i>				<i>NCCN 2008</i>				<i>KCE 2012</i>				<i>ONS 2019</i>				<i>De Sanctis 2016</i>			
Évaluateurs	1	2	T*	%**	1	2	T*	%†	1	2	T*	%†	1	2	T*	%†	1	2	T*	%†	1	2	T*	%†
Dimensions																								
Champ d'application et objectifs (/21)	19	18	37	81,6	21	20	41	97,2	20	20	40	94,4	20	19	39	91,7	14	14	28	61,1	21	19	40	94,4
Participation des groupes concernés (/21)	10	9	19	34,2	12	12	24	50,0	14	15	29	63,8	17	19	36	83,3	9	7	16	27,8	14	12	26	55,6
Rigueur du processus d'élaboration du guide (/56)	15	16	31	15,6	43	49	92	79,1	16	15	31	15,6	45	41	86	72,9	18	22	40	25,0	30	28	58	43,8
Clarté et présentation (/21)	15	16	31	65,8	21	21	42	100	18	17	35	80,6	21	21	42	100	17	16	33	75,0	21	19	40	94,4
Applicabilité (/28)	4	5	9	2,1	4	4	8	0	6	4	10	4,2	4	4	8	0	8	7	15	14,6	4	4	8	0
Indépendance éditoriale (/14)	9	9	18	58,3	11	10	21	70,8	13	11	24	83,3	8	6	14	41,7	2	4	6	8,3	5	5	10	25,0
Total (/161)	72	73	145		112	109	221		87	82	169		115	109	224		68	70	138		95	87	182	
Score global	35,9				63,4				44,6				64,5				33,3				49,3			
Recommandation de l'utilisation du guide	oui				oui				oui				oui				oui				oui			

	<i>Mirabile 2016</i>				<i>CCLG/PONF 2010</i>				<i>Arriola 2015</i>				<i>Califano 2015</i>				<i>MASCC/STSG 2011</i>			
Évaluateurs	1	2	T*	%**	1	2	T*	%†	1	2	T*	%†	1	2	T*	%†	1	2	T*	%†
Dimensions																				
Champ d'application et objectifs (/21)	18	18	36	83,3	19	17	36	83,3	21	19	40	94,4	20	19	39	91,7	18	18	36	83,3
Participation des groupes concernés (/21)	12	12	24	50,0	12	14	26	55,6	13	12	25	52,8	10	12	22	44,4	11	11	22	44,4
Rigueur du processus d'élaboration du guide (/56)	21	26	47	32,3	32	29	61	46,9	15	15	30	14,6	12	15	27	11,5	22	21	43	28,1
Clarté et présentation (/21)	21	19	40	94,4	18	18	36	83,3	18	17	35	80,6	21	18	39	91,6	18	14	32	72,2
Applicabilité (/28)	4	4	8	0	4	4	8	0	4	4	8	0	4	4	8	0	4	4	8	0
Indépendance éditoriale (/14)	4	5	9	20,8	7	6	13	37,5	8	7	15	45,8	10	11	21	70,8	10	10	20	66,7
Total (/161)	80	81	161		92	88	180		79	74	153		77	78	155		83	78	161	
Score global	41,7				48,6				38,8				39,5				41,7			
Recommandation de l'utilisation du guide	oui				oui				oui				oui				oui			

* Score total évaluateurs 1 et 2.

** Score moyen corrigé (%).

† Score moyen global et corrigé (%) (Le score minimal pour chaque thème de l'évaluation a été soustrait du score final et du score maximal pour calculer le score final corrigé).

Tableau D-3 Évaluation des guides contextuels canadiens sélectionnés sur la mucosite selon la grille AACODS

Domaines	Questions	AHS 2019		ROHPPA 2017		BCC 2019		CCO 2012		GEOQ 2017	
	Évaluateurs	1	2	1	2	1	2	1	2	1	2
Compétence	Associé à une organisation réputée?	S	S	S	S	S	S	S	S	S	S
	Détenant des compétences professionnelles ou une expérience considérable?	S	S	S	S	S	S	S	S	S	S
	Ayant produit ou publié d'autres travaux (littérature grise/noire) dans le domaine?	S	S	S	S	S	S	S	S	S	S
	Étant un expert reconnu, nommé dans d'autres sources?	S	S	S	S	S	S	S	S	S	S
	Étant cité par d'autres (utiliser Google Scholar pour une vérification rapide)?	S	S	S	S	S	S	S	S	S	S
	Étant étudiant à un cycle supérieur, sous la supervision d'experts?	S	S	S	S	S	S	S	S	S	S
	L'organisation est-elle réputée (p. ex., l'Organisation mondiale de la Santé)?	O	O	O	O	O	O	O	O	O	O
	L'organisation est-elle une autorité dans le domaine?	O	O	O	O	O	O	O	O	O	O
	Le document présente-t-il une liste de références détaillée ou une bibliographie?	O	O	O	O	N	N	O	O	O	O
Exactitude	L'objectif ou le résumé du document est-il clairement énoncé?	O	O	O	O	O	O	O	O	O	O
	Le cas échéant, le document répond-il à l'objectif ou le résumé correspond-il au contenu du document?	O	O	O	O	O	O	O	O	O	O
	La méthodologie est-elle précisée?	N	N	N	N	N	N	O	O	O	O
	Le cas échéant, est-elle respectée?	S	S	S	S	S	S	O	O	O	O
	Le document a-t-il fait l'objet d'une revue par les pairs?	N	?	N	N	N	N	O	O	N	O
	A-t-il été édité par une autorité réputée?	N	?	N	N	N	?	N	N	N	?
	A-t-il été soutenu par des références documentées et faisant autorité ou des sources fiables?	O	O	O	O	N	?	O	O	O	O
	Est-il représentatif des travaux dans le domaine?	O	O	O	O	O	O	O	O	O	O
	Si ce n'est pas le cas, le document constitue-t-il une contrepartie valide?	S	S	S	S	S	S	S	S	S	S
	Toutes les collectes de données sont-elles explicites et répondent-elles aux besoins de la recherche?	N	N	O	O	N	N	N	N	O	O
	Si le document est de source secondaire (p. ex., orientation en matière de politiques d'un rapport technique), se reporter à l'original.	S	S	S	S	S	S	S	S	S	S
	L'interprétation ou l'analyse est-elle exacte et objective?	O	O	O	O	O	O	O	O	O	O
Étendue	Les limites sont-elles clairement énoncées?	N	N	N	N	N	N	N	N	N	N
Objectivité	Une opinion, qu'elle vienne d'un expert ou non, demeure une opinion : la perspective de l'auteur est-elle claire?	O	O	O	O	O	O	O	O	O	O
	La présentation du travail semble-t-elle équilibrée?	O	O	O	O	O	O	O	O	O	O
Date	Le document indique-t-il précisément une date relativement à son contenu? L'absence de date (qui devrait pouvoir être trouvée facilement) est fortement préoccupante.	O	O	O	O	O	O	O	O	O	O
	Si le document n'est pas daté mais que sa date peut être vérifiée avec précision, existe-il une raison valide qui justifie	S	S	S	S	S	S	S	S	S	S

Domaines	Questions	AHS 2019		ROHPPA 2017		BCC 2019		CCO 2012		GEOQ 2017	
	Évaluateurs	1	2	1	2	1	2	1	2	1	2
	l'absence de date?										
	Vérification de la bibliographie : des références contemporaines clés ont-elles été incluses?	O	O	O	O	N	?	O	O	O	O
Portée	Le document est-il significatif (ce qui comprend la faisabilité, l'utilité et la pertinence)?	O	O	O	O	O	O	O	O	O	O
	Met-il la recherche en contexte?	O	O	O	O	N	O	N	O	O	O
	Enrichit-il la recherche ou y ajoute-t-il quelque chose d'unique?	O	O	O	O	O	O	O	O	O	O
	Renforce-t-il ou réfute-t-il une position actuelle?	O	O	O	O	O	O	O	O	O	O
	Le domaine de recherche serait-il moins riche sans ce document?	N	N	N	N	N	N	N	N	O	O
	Est-il intégral, représentatif, caractéristique?	O	O	O	O	O	O	O	O	O	O
	A-t-il une incidence (dans le sens d'influence sur le travail ou le comportement d'autrui)?	O	O	O	O	O	O	O	O	O	O
Score	Nombre de réponses positives/total de question sans les réponses sans objet (S)	18/24	18/24	19/24	19/24	14/24	15/24	20/25	21/25	22/25	23/25
	Résultat (%)	75,0	75,0	79,2	79,2	58,3	62,5	80,0	84,0	88,0	92,0
	Résultat total (%)	75,0		79,2		60,4		82,0		90,0	

O, Oui; N, Non : S, Sans objet; ?, Inconnu.

ANNEXE E

Résultats des extractions de guides de pratique clinique

Tableau E-1 Résultats des extractions pour les 11 guides de pratique clinique retenus

1. Appréciation de la condition de santé – Symptômes et signes de la mucosite buccale

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Mucositis is defined as inflammatory and/or ulcerative lesions of the oral and/or gastrointestinal tract. The terms oral mucositis and stomatitis are often used interchangeably, but they do not reflect identical processes. 'Mucositis' is a Medical Subject Heading term that describes inflammation of mucosa resulting from chemotherapeutic agents or ionising radiation. It typically manifests as erythema or ulcerations and may be exacerbated by local factors, such as secondary infections and trauma. Examples of chemotherapeutic agents which may cause oral mucositis are cyclophosphamide, doxorubicin, vincristine, etoposide, ifosfamide, methotrexate, docetaxel, paclitaxel, cisplatin, carboplatin, oxaliplatin, irinotecan, 5-fluorouracil (5-FU), leucovorin, and vinorelbine. 'Stomatitis' refers more generally to any inflammatory condition of oral tissues. This term should be used for oral complaints not related to chemotherapeutic agents or ionising radiation, such as targeted therapies. Clinically important adverse events (AEs) that disrupt	Chemotherapy and radiotherapy can cause severe ulcers in the mouth, also called oral mucositis. The condition can be associated with difficulties in eating and drinking, poor nutrition and infections including life-threatening septicaemia.	- Mucositis is characterized by erythema and ulceration of the mucosal lining of the gastrointestinal (GI) tract. - Oral mucositis (OM) is associated with pain, difficulty in eating and swallowing, the need for enteral or parenteral nutrition, increased opioid consumption, and interruptions to cancer therapy. - In immunosuppressed patients, OM is associated with bacteremia, increased inpatient hospitalization duration, and higher 100-day mortality. - GI mucositis is associated with nausea, vomiting, diarrhea, bloating, intestinal cramping, and anal pain.	Mucositis can affect the entire gastrointestinal tract, and the associated pain and ulceration can ultimately lead to additional morbidities or even death. Here, this discussion focuses on oral mucositis (OM), which is mucositis involving the oral cavity, oropharynx, and hypopharynx Ulceration complicating OM provides a portal of entry for microorganisms and frequently leads to systemic infections. Voir table pour grade	Mucositis is an inflammatory process that affects the mucous membranes of the oral cavity and gastrointestinal tract. Oral mucositis can range in degree from mild changes in sensation to severe oral pain, infection, and ulcerative bleeding lesions. As a result of oral mucositis, patients can also experience anorexia, dehydration, weight loss, and malnutrition because of difficulty eating and drinking.

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
the normal oral function have been described related to use of targeted therapies. These include altered taste and taste loss, oral sensitivity and pain without the presence of clinical oral lesions, and xerostomia. Compared with mTOR inhibitor-associated stomatitis, less attention has been paid to these AEs and they have not been accurately described. Examples of targeted agents which may cause stomatitis are bevacizumab, erlotinib, sorafenib, sunitinib, gefitinib, and lapatinib. 'Alimentary tract mucositis' refers to the expression of mucosal injury across the continuum of oral and gastrointestinal mucosa, from the mouth to the anus. Diagnosis of oral and gastrointestinal mucositis caused by cancer therapy is typically based upon history and clinical examination. The temporal relationship between timing of administration of chemotherapy or radiation in relation to the symptoms and signs is often sufficient to clinically document the condition. Diagnosis of oral mucosal lesions caused by targeted cancer therapies can typically be clinically confirmed by history and clinical examination. However, unlike oral mucositis caused by conventional cancer therapy, oral mucosal lesions may first occur several weeks or months after the initial dose exposure. <u>Oral mucositis grading</u> Two of the most commonly utilised scales for oral mucositis are the WHO and NCI-CTCAE scales:				

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
WHO scale for oral mucositis Grade 0 = no oral mucositis Grade 1 = erythema and soreness Grade 2 = ulcers, able to eat solids Grade 3 = ulcers, requires liquid diet (due to mucositis) Grade 4 = ulcers, alimentation not possible (due to mucositis) National Cancer Institute Common Terminology Criteria for Adverse Events version 4.03 The definition used for this grading is 'A disorder characterised by inflammation of the oral mucosal [sic: "mucosa"]'. Grade 1 = asymptomatic or mild symptoms; intervention not indicated Grade 2 = moderate pain; not interfering with oral intake; modified diet indicated Grade 3 = severe pain; interfering with oral intake Grade 4 = life-threatening consequences; urgent intervention indicated Grade 5 = death Most of the scales that are utilised for clinical care incorporate the collective measurement of oral symptoms, signs, and functional disturbances. By comparison, some scales are primarily centred on clinician-based observation of mucosal tissue injury (e.g. erythema, ulceration). These latter scales have particular value in clinical trial-based assessment of oral mucositis.				

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Symptoms such as oral pain, bleeding, dysphagia, infections and food intake impairment Assessment scales A variety of assessment scales are employed to rate the grade of severity of the oral mucositis (OM) The most commonly utilized scales are a) The National Cancer Institute (NCI)-Common Toxicity Criteria (CTC version 4.0) b) The Toxicity criteria of the Radiation Therapy Oncology Group (RTOG) c) The European Organization for Research and Treatment of Cancer (EORTC), and the criteria set out by the d) World Health Organization (WHO) in 1979 e) Oral Mucositis Assessment Scale (OMAS) f) M. D. Anderson symptom inventory, head and neck module g) OMQD scale • No evidence-based recommendation is possible about the superiority of one scale over another • It is appropriate to assess mucositis with both modalities (ORO and PRO instruments)	Oral complications occurring during and following cancer treatment are common and can cause pain, difficulty in swallowing and phonation and poor nutrition. Mucositis lesions can be severe causing significant pain, interfering with nutrition and often requiring modification of the chemotherapy regimen. In addition, mucositis may predispose a child to fungal infection (most commonly candidiasis), viral infection and bacterial infection, which may lead onto life threatening systemic infection. Recommendations for oral assessment during cancer treatment There is a variety of oral assessment tools from which to choose. Using those which have been shown to be valid and reliable would be most valuable (✓). The Eiler's Oral Assessment Guide (OAG) offers a valid, reliable and clinically useful tool for assessing oral status (D). Those responsible for assessment of the oral cavity should be appropriately trained in the use of the selected assessment tool. Ideally, some form of reliability (inter and/or intra-rater) testing of the too; in the clinical setting should be	Mucositis: acute pain due to inflammation of mucosa. Mucositis is defined as erythematous, inflammatory, and painful ulcerative lesions that occur in the mucosal lining of the mouth, pharynx, oesophagus, and entire gastrointestinal tract secondary to chemotherapy, biologic therapy or radiotherapy. It primarily affects the non-keratinized tissues, such as the soft palate, the pharynx, the floor of the mouth, and the lateral borders of the tongue. Ulcerations and mucosal infections can hesitate in oedema and inflammation that cause pain.	Grades of oral mucositis (recommended management of afatinib adverse events is based on severity grading of the National Cancer Institute Common Terminology Criteria for Adverse Events version 3.0, the one used in afatinib clinical trials): Grade Description 1 : Mucosal erythema. Mild symptoms. 2 : Few ulcers or pseudomembranes. Moderate symptoms. 3 : Confluent ulcers or pseudomembranes. Severe symptoms: oral intake is difficult; respiratory symptoms interfere with activities of daily living. 4: Life-threatening. Urgent intervention required. 5 : Death	Grade 1 toxicity: erythema of mucosa Grade 2 toxicity: patchy ulcerations or pseudomembranes Grade 3 toxicity: confluent ulcerations or pseudomembranes; bleeding with minor trauma Grade 4 toxicity: tissue necrosis; significant spontaneous bleeding; life threatening consequences	Oral mucositis may present with broad areas of erythema, aphthous-like stomatitis, or superimposed upon those of radiation and conventional chemotherapy. Severe mucositis is uncommon with single-agent therapy; however, in combination with other cytotoxic chemotherapy or radiation, severe and prolonged mucositis may be seen.

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
	conducted. Nursing staff are best placed for the regular assessment of the child's oral status. The frequency with which a child's mouth is assessed should be determined on an individual basis. Frequency should increase at the onset of oral complications. Oral assessment should be used to check good basic oral hygiene is being maintained. For a child with oral complication (e.g. indicated by an OAG score of greater than 8) an appropriate pain assessment tool should be used to ensure adequate pain control and therapeutic interventions are available (✓).				

2. Appréciation de la condition de santé – Symptômes et signes compatibles avec d'autres conditions cliniques (diagnostic différentiel)

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Ø	Ø	Ø	Ø	Ø

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Ø	Ø	Ø	Ø	Ø	Ø

3. Appréciation de la condition de santé – Symptômes et signes d’alarme

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Ø	Ø	Ø	Ø	Ø

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Ø	Ø	Ø	Ø	Ø	Ø

4. Appréciation de la condition de santé – Facteurs de risque de la mucosite buccale, antécédents médicaux, antécédents médicamenteux et habitudes de vie, pertinents à rechercher en lien avec la mucosite buccale

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Risk factors: • modality, intensity, and route of delivery of the cancer therapy • use of combination therapy (e.g. head and neck radiation with concurrent chemotherapy) • genetic polymorphisms • comorbidities (e.g. malnutrition) • patients who develop clinically significant salivary hypofunction/xerostomia due to anti-emetic or other anti-cholinergic drugs administered during acute cancer treatment may experience increased discomfort from oral mucositis	Ø	Ø	Risk factors: • Cancer therapy being administered, including type of therapy (chemotherapy, radiation, or combined chemoradiotherapy), dosage, and delivery schedule • Methotrexate • Genetic differences (polymorphisms) • Age • Gender • Comorbidities • Type of malignancy • Original oral/dental health • Trauma and irritation caused by dentition and oral function • Nutritional status • Use of new drugs that has entered the marketplace (including anti-angiogenic agents and other targeted therapies) RECOMMENDATIONS - Risk Factors and Assessment of OM: • The use of a valid and reliable scale is recommended for the routine clinical assessment of OM. • Regular assessment of OM by all members of the oncology team will facilitate standard	Ø

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
			interventions for specified events. This is similar in concept to measuring body temperature or blood pressure. • Because of the small number of clinical trials on the prevention and management of OM, recommendations are based on a combination of evidence-based information and expert judgment. • Assessment of treatment-related OM risk factors should be performed so that clinicians can anticipate and promptly treat OM, thus allowing the goals of no dose reductions or delays. • Patients receiving specific drugs or combinations known to be associated with a high-risk for OM, patients receiving HCT, and patients receiving accelerated radiation or combined modalities should receive special care, including frequent oral assessments. • A dental examination is recommended for all patients to identify and treat potential sources of infection and areas at risk for exacerbating OM. • All patients scheduled for high-dose therapy and HCT should undergo formal dental evaluation by a dentist familiar with OM risk factors. • Patients should be encouraged to modify behavior to reduce the incidence and severity of oral mucosal trauma, including avoiding rough textured foods, vigorous or excessive chewing, and oral habits that can injure compromised mucosal surfaces (lip or cheek chewing).	

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
There are some clinical and therapeutic variables increasing the risk to develop more severe mucositis. Pre-treatment identification of these factors may help the physician in anticipating the need for nutritional and analgesic support Patient related risk factors (Non-treatment related risk factors) • Poor oral hygiene • Periodontal disease • Persistent alcohol or tobacco use • Xerostomia/hyposalivation • Low body mass index (BMI <18.5) • Unintentional weight loss before therapy (i.e., >5% weight loss over prior 1 month or >10% in the last 6 months) • Immunosuppression due to comorbidities (such as diabetes mellitus) or aged patients • Female sex Cytotoxic therapy-related risk factors (Treatment related risk factors): • Radiotherapy (radiation source, total dose, daily fractionation, and previous RT) • Chemotherapy (dosage, type of drug and timing) • Bioradiotherapy (RT plus targeted therapy).	Ø	Putative risk factors for mucosal sensitivity include: aggressive chemoradiation regimens, xerostomia, and active cigarette smoking. Concurrent administration of systemic therapy to radiation is associated with a significantly increased frequency, severity, and duration of oral mucositis.	Risk factors are advanced age, poor oral and dental hygiene and/or denture use.	Ø	Ø

5. Appréciation de la condition de santé – Examen physique

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Ø	Ø	Ø	All aspects of OM must be measured, whether for clinical care or research. If OM is assessed using clinical assessment of oral mucosa changes only, the measures will not include OM impact on patient comfort and oral function and separate measures are needed to assess for symptoms and functional alterations. If mucositis pain arises in the throat initially, it may not be possible to directly visualize mucositis. Therefore, a discrepancy may be seen between the patient's functional and symptom status and the assessed clinical mucosal status.	Ø

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Ø	Recommendations for oral care at time of cancer diagnosis All children should undergo a dental assessment at the time of cancer diagnosis, if possible, before cancer treatment commences.	Mucosal pain may be caused by or exacerbated by oral infections. A careful oral exam to rule out infection since it can be easily treated.	Ø	Ø	Ø

6. Appréciation de la condition de santé – Analyses de laboratoire

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Ø	Ø	Ø	Ø	Ø

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Ø	Ø	Ø	Ø	Ø	Ø

7. Conduite thérapeutique – Traitements recommandés pour la mucosite buccale

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Oral Cavity Mucositis Guideline (Modified from MASCC/ISOO Clinical Practice Guidelines for Oral Mucositis / level of evidence for each recommendation is in brackets following the recommendation statement) <i>Oral care protocols:</i> The panel suggests that oral care protocols be used to prevent oral mucositis in all age groups and across all cancer treatment modalities (III). <i>Doxepin mouthwash:</i> The panel suggests that 0.5% doxepin mouthwash may be effective to treat pain due to oral mucositis (IV). <i>Oral cryotherapy:</i> The panel recommends that 30 min of oral cryotherapy be used to prevent oral mucositis in patients receiving bolus 5-fluorouracil chemotherapy (II). <i>Pentoxifylline:</i> The panel suggests against that systemic pentoxifylline, administered orally, be used to prevent oral mucositis in patients undergoing bone marrow transplantation (III). <i>Transdermal fentanyl:</i> The panel suggests that transdermal fentanyl may be effective to treat pain due to oral mucositis in patients receiving conventional and high-dose chemotherapy, with or without total body irradiation (III). <i>Low-level laser therapy:</i> The panel recommends that low-level laser therapy (wavelength at 650 nm, power of 40 mW, and each square centimeter treated with the required time to a tissue energy dose of 2	Prevention of oral mucositis: - Oral cooling (ice chips) should be offered to prevent oral mucositis caused by chemotherapy associated with a significant risk of mucositis (strong recommendation). - The use of sucralfate, allopurinol, benzydamine or zinc mouth washes can be considered to prevent oral mucositis in patients receiving chemotherapy and/or radiotherapy (weak recommendation). - The use of chlorhexidine mouthwash is not recommended to prevent oral mucositis (weak recommendation). - Amifostine is not recommended to prevent oral mucositis associated with chemotherapy or radiotherapy (weak recommendation). - Specialized, intensified oral care protocols are not recommended in addition to basic oral care and hygiene measures. However, patients should be informed about the importance of maintaining oral hygiene during treatment (weak recommendation). - There is insufficient evidence to recommend intra-oral fluoride releasing systems to prevent oral mucositis. - Palifermin is not recommended to prevent oral mucositis in patients receiving non-myeloablative chemotherapy and/or radiotherapy (strong recommendation). - The use of honey can be considered to prevent oral	Abbreviations: 5-FU, 5-fluorouracil; BOC, basic oral care; CHX, chlorhexidine; CT, chemotherapy; GM-CSF, granulocyte-macrophage colony-stimulating factor; Gy, grays; H&N, head and neck; HSCT, hematopoietic stem-cell transplantation; KGF-1, keratinocyte growth factor 1; LoE, level of evidence; OM, oral mucositis; PBM, photobiomodulation; PTPs, photobiomodulation therapy parameters; RT, radiotherapy; TBI, total body irradiation. Oral mucositis <u>BASIC ORAL CARE (BOC)</u> <i>The literature on mixed-medication mouth rinses was reviewed but was excluded from analysis because of the heterogeneity of the ingredients.</i> - The panel suggests that implementation of multiagent combination oral care protocols is beneficial for the prevention of OM during CT (LoE III). - The panel suggests that implementation of multiagent combination oral care protocols is beneficial for the prevention of OM during H&N RT(LoE III). - The panel suggests that implementation of multiagent combination oral care protocols is beneficial for the prevention of OM during HSCT (LoE III). - No guideline was possible regarding the use of professional oral care for the prevention of OM in patients with hematologic, solid, or H&N cancers because of limited and inconsistent data. An expert opinion complements this	<i>For many years, various different compounded mouthwashes with various ingredients, usually including topical anesthetics, have been recommended. These are collectively known as “magic mouthwashes,” and institutions often have their favorite formulation. The most common ingredients include diphenhydramine, viscous lidocaine, dyclonine magnesium hydroxide or aluminum hydroxide, nystatin, and occasionally corticosteroids. Several studies have shown that for mild to moderate mucositis, bland saline rinses are as effective as these combination rinses and, obviously, much less expensive. Furthermore, nystatin has been shown to be ineffective in preventing oral candida colonization in a number of settings for immunocompromised patients.</i> <i>Lidocaine products (viscous, gel, or solutions) can provide good topical anesthesia for OM discomfort and pain. Patients should be instructed to coat painful mucosal surfaces and then spit the solution out. Experts do not recommend patients generally gargle or swallow lidocaine for 2 reasons: 1) it can reduce the gag reflex and make the patient vulnerable to an aspiration pneumonia and 2) it will lead to systemic uptake and the safety of this has not been established. Inadequate data are available regarding maximum dose, but many physicians believe that 25 ml per day is within safe limits. Additionally, patients should avoid eating or performing oral hygiene measures when their mouth is</i>	Recommended for Practice: - Cryotherapy - Low Level Laser Therapy in Patients Undergoing Hematopoietic Cell Transplantation - Low Level Laser Therapy in Patients With Head and Neck Cancer - Oral Care Protocol - Sodium Bicarbonate Likely to Be Effective: - Benzydamine for Patients Receiving Combination Chemotherapy and Radiation Therapy - Benzydamine for Radiation-Related Mucositis - Dexamethasone Mouthwash - Lactobacillus Lozenges - Palifermin for Patients Receiving Chemotherapy and Radiation for Head and Neck Cancer - Palifermin with High-Dose Chemotherapy and/or Hematopoietic Cell Transplantation Effectiveness Not Established: - Allopurinol Mouthwash - Aloe Vera - Amifostine - ATL-104 - Beta-glucan - Bethanechol - Calendula Officinalis - CAM2028 - Camellia and Wheat Extract - Chamomilla recutita - Colchicine Mouthwash - Colony Stimulating Factors: GCSF & GMCSF Mouth Rinse - Corticosteroids, Topical

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J/cm²), be used to prevent oral mucositis in patients receiving HSCT conditioned with high-dose chemotherapy, with or without total body irradiation (II). <i>GM-CSF</i>: The panel suggests against that granulocyte–macrophage colony-stimulating factor (GM-CSF) mouthwash be used to prevent oral mucositis in patients receiving high-dose chemotherapy, for autologous or allogeneic stem cell transplantation (II). <i>Pilocarpine</i>: The panel suggests against that systemic pilocarpine, administered orally, be used to prevent oral mucositis in patients receiving high-dose chemotherapy, with or without total body irradiation, for HSCT (II). <i>Glutamine</i>: The panel recommends against that i.v. glutamine be used to prevent oral mucositis in patients receiving high-dose chemotherapy, with or without total body irradiation, for HSCT (II). <i>Isegaran antimicrobial mouthwash</i>: The panel recommends against that isegaran antimicrobial mouthwash be used to prevent oral mucositis in patients receiving high-dose chemotherapy, with or without total body irradiation, for HSCT (II). <i>Morphine</i>: The panel recommends that patient-controlled analgesia with morphine be used to treat pain due to oral mucositis in patients undergoing HSCT (II). <i>Sucralfate mouthwash</i>: The panel recommends against that sucralfate mouthwash be used to prevent oral mucositis in patients receiving	mucositis in patients undergoing (chemo)radiotherapy for head and neck cancer (weak recommendation). - Low-level laser therapy is not recommended to prevent oral mucositis in cancer patients receiving chemotherapy outside the framework of a clinical trial (weak recommendation). Treatment of oral mucositis: <i>As for preventive use, rinsing with any mouthwash probably has a mechanical effect on the oral cavity. Due to the lack of strong evidence, no detailed advice on the preferred composition of mouth washes can be given.</i> - Allopurinol mouthwashes can be considered to treat oral mucositis due to chemo- and/or radiotherapy (weak recommendation). - Benzydamine, sucralfate or chlorhexidine mouthwashes, magic mouthwash, phenylbutyrate mouthwash, triclosan and sodium bicarbonate mouth wash are not recommended to treat oral mucositis due to chemo- and/or radiotherapy (weak recommendation). - Honey is not recommended to treat oral mucositis due to chemo- and/or radiotherapy (weak recommendation). - Low-level laser therapy can be considered to treat oral mucositis due to chemo- and/or radiotherapy. For patients with a tumour in or near the oral cavity, low-laser therapy should only be used within the framework of a clinical trial (weak recommendation). - Sucralfate gel is not recommended to treat oral	guideline: Although there was insufficient evidence to support the use of professional oral care for OM prevention, the panel is of the opinion that dental evaluation and treatment as indicated before cancer therapy are desirable to reduce risk for local and systemic infections from odontogenic sources (LoE III). - No guideline was possible regarding the use of patient education for the prevention of OM in patients with hematologic cancer during HSCT or CT because of limited and inconsistent data. An expert opinion complements this guideline: The panel is of the opinion that educating patients about the benefits of BOC strategies is still appropriate because this may improve self-management and adherence to the recommended oral care protocol during cancer treatment (LoE III). - No guideline was possible regarding the use of saline or sodium bicarbonate rinses in the prevention or treatment of OM in patients undergoing cancer therapy because of limited data. An expert opinion complements this guideline: Despite the limited data available for both saline and sodium bicarbonate, the panel recognizes that these are inert, bland rinses that increase oral clearance, which may be helpful for maintaining oral hygiene and improving patient comfort (LoE III). - The panel suggests that CHX not be used in the prevention of OM in patients undergoing H&N RT (LoE III). (In the data discussion: it does not exclude the other indications for CHX, such as	<i>numb to avoid accidental trauma to oral tissues. Any agent that induces topical anesthesia without compromising mucosal health can be used, including diphenhydramine, benzocaine, and doxepin.</i> RECOMMENDATIONS - Prevention Strategies: - Good oral hygiene is a universally recommended “good clinical practice.” - Cryotherapy is recommended in patients receiving bolus-dosed 5-FU or edatrexate therapy or high-dose melphalan before HCT. - Bland oral rinses are commonly used as a supportive care measure. Clinical trials have not definitively shown superiority of one rinse over another, and therefore the choice should be driven by clinical assessment and patient preference. These rinses provide mild symptomatic relief, moisturize tissues, and remove debris. - Topical oral antimicrobials (rinses or lozenges) should not be used to prevent OM. They can, however, have value in reducing microbial colonization (e.g., bacterial dental plaque) when routine oral hygiene is not possible. - Palifermin is recommended as a preventive therapy in patients receiving TBI-containing conditioning regimens before autologous stem cell transplantation. - Because of the preliminary nature of the data, palifermin is not routinely recommended in other settings, including autologous transplant without TBI, allogeneic transplant, or	- COX-2 Inhibitors - Date Palm Pollen - Diocetahedral Smectite and Iodine Glycerine Cream (DSIG) - Doxepin Mouthwash - Elemental Diet and Oral Rinse - Erythropoietin - Flurbiprofen Tooth Patch - Folinic Acid - Glutamine - Hangeshashinto (TJ-14) - Herbal Medicine - High Dose Laser Therapy (HDLT) - Honey - Human Intestinal Trefoil Factor - Humidification - Hyaluronic Acid/Sodium Hyaluronate - Indigowood Root - Infrared Phototherapy - Irsogladine Maleate - Licorice - Light Therapy/Visible Light Therapy - Low Level Laser Therapy in Patients Receiving Chemotherapy - Manuka and Kanuka - Misoprostol Oral Rinse - Morphine Mouthwash - Mucosite Mouthwash (Mucosite mouthwash is a solution composed of verbascoside (a chemical present in many plants used for flavoring and medicines that has antioxidant properties) and sodium hyaluronate (a chemical found in the body that holds moisture and has been shown to facilitate wound healing)) - N-acetyl Cysteine - Octenidol - Omega 3 (Eicosapentaenoic Acid and Others) - Oral Bismuth

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chemotherapy for cancer (I). <i>Sucralfate mouthwash:</i> The panel recommends against that sucralfate mouthwash be used to treat oral mucositis in patients receiving radiation therapy (II). <i>Benzydamine mouthwash:</i> The panel recommends that benzydamine mouthwash be used to prevent oral mucositis in patients with head and neck cancer receiving moderate dose radiation therapy (up to 50 Gy), without concomitant chemotherapy (I). <i>Chlorhexidine mouthwash:</i> The panel suggests against that chlorhexidine mouthwash be used to prevent oral mucositis in patients receiving radiation therapy for head and neck cancer (III). <i>Misoprostol mouthwash:</i> The panel suggests against that misoprostol mouthwash be used to prevent oral mucositis in patients receiving radiation therapy for head and neck cancer (III). <i>Pilocarpine:</i> The panel suggests against that systemic pilocarpine, administered orally, be used to prevent oral mucositis in patients receiving radiation therapy for head and neck cancer (III). <i>PTA and BCoG:</i> The panel recommends against that PTA (polymyxin, tobramycin, amphotericin B) and BCoG antimicrobial lozenges and PTA paste be used to prevent oral mucositis in patients receiving radiation therapy for head and neck cancer (II). <i>Morphine mouthwash:</i> The panel	mucositis due to chemo- and/or radiotherapy (weak recommendation).	prevention or treatment of oral infection. If CHX is indicated because of concurrent oral infection and OM, it is acceptable to use it for the oral infection.) Definitions: Basic oral care (BOC) includes all routine actions performed by the patient or care provider to reduce the bacterial load in the oral cavity, to prevent infections, and to provide comfort. This usually involves mechanical cleaning (tooth brushing, flossing), mouthwashes to reduce bacterial build-up (bland rinses), and hydration and lubrication (applying moisturizing agents) to the oral mucosal surfaces. In this guideline update, the guidelines on BOC were divided into 5 subtopics: 1. Patient education: educational interventions designed to help patients understand the importance of oral care and to perform the recommended oral practices during cancer therapy (this class of intervention is new to the guidelines). 2. Multiagent combination oral care protocols: these protocols serve to increase the awareness of patients and staff of the importance of good oral hygiene that may lead to fewer and less severe oral complications; typically, the protocols involved recommendations with regard to the timing, frequency, and products used, which included various combinations of bland mouth rinses, toothbrushes, and flossing procedures; 3. Professional oral care: protocols delivered by dental professionals before or during cancer treatment.	other malignancies. - Amifostine is recommended for the prevention of xerostomia related to head and neck irradiation and can reduce mucositis associated with high-dose melphalan. RECOMMENDATIONS - Treatment Strategies: - Bland rinses can be used for mild to moderate OM pain on an as needed basis. - Topical anesthetics can be used to provide OM pain relief. Patients should take care to avoid mucosal injury while tissues are anesthetized, and they should not gargle or swallow the solution unless instructed. With more severe mucositis pain, topical anesthetics can be used for "breakthrough pain" until analgesics can be administered and become effective. - The formulation of mouthwashes containing topical anesthetics ("magic mouthwashes") varies among institutions. No one formulation has been shown to be superior; selection should be driven by patient preference. Alcohol-containing mouthwashes should be avoided. Overall patient acceptance of these rinses should be assessed regularly and adjustments to the formulation or alternative preparations should be made if the rinse is either unacceptable or ineffective. - Prophylactic antiviral and antifungal therapy may be considered in myelosuppressive therapy to prevent infections that can aggravate OM. RECOMMENDATIONS - General	- Palifermin for General Oncology Patients - Payayor - Pentoxifylline - Phenylbutyrate Mouthwash - Pilocarpine - Platelet Gel - Polaprezinc - Povidone Iodine - Probiotics - Professional Oral Care - Prophylactic Chlorhexidine - Prophylactic Colony Stimulating Factors: GCSF - GMCSF (Systemic) - Propolis (Bee Glue) - Pycnogenol - Recombinant Epidermal Growth Factor (RhEGF) - Repifermin - Rhodiola Algida - Royal Jelly - Saline - Salivary Stimulation - Samital® Mouth Rinse - Selenium - Triamcinolone Acetonide - Triclosan Mouth Rinse - Turmeric - Vitamin E - Zinc/Zinc Supplements Effectiveness Unlikely: - Calcium Phosphate Mouth Rinse/Caphosol - Doxycycline Mouthwash - Isegran - Traumeel S - Wobe-Mugos E/Proteolytic Enzyme Mixture Not Recommended for Practice: "Magic" Mouthwash (Mixed Medication Mouthwash) (Magic mouthwash is used to treat oral mucositis associated with chemotherapy or radiation. The

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suggests that 0.2% morphine mouthwash may be effective to treat pain due to oral mucositis in patients receiving chemoradiation therapy for head and neck cancer (III). <i>Sucralfate mouthwash:</i> The panel recommends against that sucralfate mouthwash be used to treat oral mucositis in patients receiving radiation therapy (II) for head and neck cancer. <i>Isegaran antimicrobial mouthwash:</i> The panel recommends against that isegaran antimicrobial mouthwash be used to prevent oral mucositis in patients receiving radiation therapy or concomitant chemoradiation for head and neck cancer (II). <i>Sucralfate mouthwash:</i> The panel recommends against that sucralfate mouthwash be used to prevent oral mucositis in patients receiving radiation therapy (I) or concomitant chemoradiation (II) for head and neck cancer. <i>Low-level laser therapy:</i> The panel suggests that low-level laser therapy (wavelength around 632.8 nm), be used to prevent oral mucositis in patients undergoing radiotherapy, without concomitant chemotherapy, for head and neck cancer (III). <i>KGF-1/palifermin:</i> The panel recommends that recombinant human keratinocyte growth factor-1 (KGF-1/palifermin) be used to prevent oral mucositis (at a dose of 60 µg/kg per day for 3 days before conditioning treatment and for 3 days after transplant) in patients... • Original MASCC/ISOO		4. Saline: saline rinses were compared with other types of bland rinses and chlorhexidine (CHX) rinses. 5. Sodium bicarbonate: a mouthwash of sodium bicarbonate diluted in water was compared with other bland rinses and CHX rinses. 6. Chlorhexidine: CHX rinses were compared with placebo rinses, bland mouth rinses, and other active agent rinses. <u>ANTI-INFLAMMATORY AGENTS</u> • The panel recommends <i>benzydamine</i> mouthwash for the prevention of OM in patients with H&N cancer receiving a moderate dose RT (<50 Gy) (LoE I). • The panel suggests the use of <i>benzydamine</i> mouthwash for the prevention of OM in patients with H&N cancer who receive RT-CT (LoE II). <i>New data regarding other anti-inflammatory agents, such as celecoxib, irsogladine maleate, misoprostol, and rebamipide, were found. The evidence for each of these agents was insufficient to support a guideline.</i> <u>PHOTOBIOMODULATION (PBM)</u> <i>The rapidly growing field of laser and light therapy using low-level energy to stimulate biologic responses has been named photobiomodulation (PBM).</i> • The panel recommends the use of intraoral PBM therapy using low-level laser therapy for the prevention of OM in adult patients receiving HSCT conditioned with high-dose CT, with or without TBI, using one of the selected protocols listed in Table 2 (LoE I).	Management Strategies: • Adequate patient education and communication between the patient and all members of the cancer care team are critical, particularly since nursing staff and other support staff typically interact with the patient more frequently than the physician. Nurses are often the first to become aware of symptoms or clinical evidence of OM. • Patients should be educated on the typical time course and duration of anticipated mucositis based on treatment related risk factors. In the transplant setting, management of mucositis requires multidisciplinary involvement. • A stepwise approach to mucositis management is recommended, starting with bland rinses, then topical anesthetics, then systemic analgesics of increasing strength as needed. • Patients must be closely questioned regarding the effectiveness of therapy and side effects, with prompt intervention for inadequate pain relief. • Different strategies are needed during different periods of mucositis. Supportive care medications must be adjusted at time intervals tailored to emerging symptoms. RECOMMENDATIONS - Radiation Therapy Management Strategies: • In patients with metal dental restorations undergoing radiation therapy, use of a dental guard, bite block, cotton roll, wax around the filling, or other devices to separate the metal from the mucosa will reduce	composition of magic mouthwash varies widely and may include antibiotics, antihistamines, local anesthetics, antifungals, corticosteroids, or antacids. The majority of magic mouthwash formulations are intended to be held in the mouth for one to two minutes and then spit or swallowed.) • Chlorhexidine (Not Prophylactic) • Sucralfate

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guideline: receiving high-dose chemotherapy and total body irradiation, followed by autologous stem cell transplantation, for a hematological malignancy (II). • Updated ESMO guideline:...with hematological malignancy treated with chemotherapy and/or targeted agents, and/ or HSCT with or without total body irradiation (TBI) (local–regional radiotherapy alone not included), and who are anticipated to develop grade 3 or grade 4 oral mucositis. <i>Oral cryotherapy:</i> The panel suggests that oral cryotherapy be used to prevent oral mucositis in patients receiving high dose melphalan, with or without total body irradiation, as conditioning for HSCT (III). <i>Zinc supplements:</i> The panel suggests that systemic zinc supplements administered orally may be of benefit to prevent oral mucositis in oral cancer patients receiving radiation therapy or chemoradiation (III). Expert opinion recommendations for targeted therapy-associated stomatitis (level of evidence is not applicable for these recommendations from the experts) <i>Oral care protocols:</i> Expert opinion suggests that basic oral care protocols be used to prevent stomatitis in all cancer groups and across all targeted therapy modalities <i>Sodium bicarbonate containing mouthwash:</i> Expert opinion		• The panel recommends the use of intraoral <i>PBM</i> therapy using low-level laser therapy for prevention of OM in adults receiving RT to the H&N (without CT) (Table 2); safety considerations unique to patients with oral cancer should be considered (LoE II). • The panel recommends the use of intraoral <i>PBM</i> therapy using low-level laser therapy for the prevention of OM in adults receiving RT-CT for H&N cancer (Table 2); safety considerations unique to patients with oral cancer should be considered (LoE I). • For all PBM guidelines, it is recommended that the specific PTPs of the selected protocol will be followed for optimal therapy. CRYOTHERAPY <i>Cryotherapy results in vasoconstriction of the superficial blood vessels, thereby limiting the delivery of cytotoxic drugs to the oral tissue and reducing damage to the oral mucosa. Considering that the cooling is temporary, this treatment is only applicable for cytotoxic protocols that are delivered over a short time or for cytotoxic agents with a short half-life.</i> • The panel recommends using oral cryotherapy to prevent OM in patients undergoing autologous HSCT when the conditioning includes high dose melphalan (LoE II). • The panel recommends using 30 min of oral cryotherapy to prevent OM in patients receiving bolus 5-FU CT during the infusion of the CT (LoE II).	adjacent mucositis. • Placement of a prophylactic PEG tube may be considered in patients at high risk for mucositis and esophagitis, typically patients with a large volume of tumor who are receiving radiation therapy and platinum-based chemotherapy, or patients presenting with significant dysphagia or weight loss. <i>Abbreviations: HCT, hematopoietic cell transplant; OM, oral mucositis; PEG, percutaneous endoscopic gastrostomy; TBI, total body irradiation.</i>	

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suggests that patients should rinse their mouth with a bland non-alcoholic, sodium bicarbonate containing mouthwash four to six times a day to prevent stomatitis <i>Sodium bicarbonate containing mouthwash:</i> Expert opinion suggests that the frequency of the bland non-alcoholic, sodium bicarbonate containing mouthwash be increased, if necessary, up to each hour to treat stomatitis <i>Chewing gum, candy, salivary substitutes or sialogogues:</i> Expert opinion suggests that sugarless chewing gum or candy, salivary substitutes or sialogogues in patients with oral dryness should be considered to treat oral dryness <i>Analgesics:</i> Expert opinion suggests that adequate pain management, e.g. anesthetic mouthwashes (viscous lidocaine 2%), coating agents, or systemic analgesics following the WHO pain management ladder may be provided to treat pain from stomatitis. If patients find the mouthwash painful, they should be advised to use one of these approaches beforehand <i>Analgesics:</i> Expert opinion suggests that, with moderate pain, a topical NSAID (e.g. amlexanox 5% oral paste) may be considered to treat moderate pain from stomatitis. When NSAIDs are not tolerated, consider acetaminophen (paracetamol) as maintenance therapy in combination with an immediate release oral opioid or fast acting fentanyl preparation (e.g. 50 µg fentanyl nasal spray) to relief pain short term, for instance before dinner. Fast acting fentanyl		<u>ANTIMICROBIALS, COATING AGENTS, ANESTHETICS, AND ANALGESICS</u> - Topical <i>morphine</i> 0.2% mouthwash is suggested for the treatment of OM-associated pain in patients with H&N cancer who receive RT-CT (LoE III). <i>Sucralfate</i> (combined topical and systemic) is not recommended for the prevention of OM-associated pain in patients with H&N cancer who receive RT (LoE II). <i>Sucralfate</i> (combined topical and systemic) is not recommended for the treatment of OM-associated pain in patients with H&N cancer who receive RT (LoE II). <i>Sucralfate</i> (combined topical and systemic) is not recommended for the treatment of OM-associated pain in patients with solid cancer who receive CT (LoE II). <u>GROWTH FACTORS AND CYTOKINES</u> - The use of <i>KGF-1</i> intravenously is recommended for the prevention of OM in patients with hematologic cancer undergoing autologous HSCT with a conditioning regimen that includes high-dose CT and TBI (LoE I). - The evidence suggests that topical <i>GM-CSF</i> should not be used for the prevention of OM in patients undergoing HSCT (LoE II). <u>NATURAL AND MISCELLANEOUS</u> - The panel recommends against the use of glutamine (parenteral) for the prevention		

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preparations are registered for patients who are already treated with opioids, they may also be considered in this population because of their short-term pain relief <i>Analgesics:</i> Expert opinion suggests that with persistent severe pain more aggressive pain management may be considered to treat severe pain from stomatitis. Since oral complaints can complicate administration of drugs by mouth, one should consider other kinds of administration routes, such as transdermal or intranasal routes <i>Other treatments:</i> Expert opinion suggests that other treatments, such as coating agents, topical analgesic or anti-inflammatory agents, topical anesthetics, and alternative mouthwashes may be considered to treat stomatitis <i>Steroids; topical:</i> Expert opinion suggests that with ulcers topical high potency corticosteroids should be considered first: dexamethasone mouth rinse (0.1 mg/ml) in case several locations of the oral cavity is involved or difficult to reach ulcerations; clobetasol gel or ointment (0.05%) in case of limited locations and easy to approach ulcers to treat mIAS <i>Steroid; intralesional injection:</i> Expert opinion suggests that, with no ulcer resolution, intralesional steroid injection (triamcinolone weekly; total dose 28 mg) in conjunction with oral expert AND topical clobetasol gel or ointment (0.05%) should be considered to treat mIAS		of OM in patients undergoing HSCT (LoE I). - The panel suggests oral glutamine for the prevention of OM in patients with H&N cancer who receive receiving RT-CT. The suggestion is with caution because of the higher mortality rate seen in patients undergoing HSCT who receive parenteral glutamine (LoE II). - Honey is suggested for the prevention of OM in patients with H&N cancer who receive treatment with either RT or RT-CT (LoE II). - Chewing gum is not suggested for the prevention of OM in pediatric patients with hematological or solid cancer who receive CT (LoE III). Gastrointestinal mucositis - The panel suggests that probiotics containing <i>Lactobacillus</i> spp. may be beneficial for the prevention of RT-induced or RT-CT-induced diarrhea in patients with pelvic malignancy (LoE III). - The panel suggests that hyperbaric oxygen is an effective way to treat RT-induced proctitis in patients with pelvic malignancy (LoE II). The 2014 guidelines for which there was no new evidence Oral mucositis 1-LoE II – Recommendation: The panel recommends that patient-controlled analgesia with morphine be used to treat pain due to oral mucositis in patients undergoing HSCT. 2-LoE III – Recommendation against: The panel		

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<i>Steroids; systemic:</i> Expert opinion suggests that for highly symptomatic ulcers and for recurrent ulcers or oesophageal lesions, systemic corticosteroids as initial therapy to bring symptom under control quickly (high-dose pulse 30–60 mg or 1 mg/kg) oral prednisone/ prednisolone for 1 week followed by dose tapering over the second week should be considered to treat mIAS		recommends that PTA (polymyxin, tobramycin, amphotericin B) and BCoG (bacitracin, clotrimazole, gentamicin) antimicrobial lozenges and PTA paste not be used to prevent OM in patients receiving RT for H&N cancer. • 3a-LoE II – Recommendation against: The panel recommends that iseganan antimicrobial mouthwash not be used to prevent OM in patients receiving high-dose chemotherapy, with or without total body irradiation, for HSCT. • 3b-LoE II – Recommendation against: The panel recommends that iseganan antimicrobial mouthwash not be used to prevent OM in patients receiving RT or RT-CT for H&N cancer. • 4-LoE III – Suggestion against: The panel suggests that systemic pentoxifylline, administered orally, not be used to prevent OM in patients undergoing bone marrow transplantation. • 5a-LoE III – Suggestion against: The panel suggests that systemic pilocarpine, administered orally, not be used to prevent OM in patients receiving RT for H&N cancer. • 5b-LoE II – Suggestion against: The panel suggests that systemic pilocarpine, administered orally, not be used to prevent OM in patients receiving high-dose CT, with or without total body irradiation, for HSCT.		

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		GI mucositis 6-LoE II – Recommendation: The panel recommends that intravenous amifostine be used, at a dose of ≥ 340 mg/m², to prevent radiation proctitis in patients receiving RT. 7-LoE III – Suggestion: The panel suggests that intravenous amifostine be used to prevent esophagitis induced by RT-CT in patients with non-small cell lung carcinoma. 8-LoE II – Recommendation: The panel recommends that octreotide, at a dose of ≥ 100 µg subcutaneously twice daily, be used to treat diarrhea induced by standard- or high dose CT associated with HSCT, if loperamide is ineffective. 9-LoE III – Suggestion The panel suggests that sucralfate enemas be used to treat chronic radiation-induced proctitis in patients with rectal bleeding. 10-LoE I – Recommendation against: The panel recommends that systemic sucralfate, administered orally, not be used to treat gastrointestinal mucositis in patients receiving RT for a solid tumor. 11-LoE II – Suggestion: The panel suggests that systemic sulfasalazine, at a dose of 500 mg administered orally twice a day, be used to prevent radiation-induced enteropathy in patients receiving RT to the pelvis.		

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		• 12-LoE I – Recommendation against: The panel recommends that 5-acetyl salicylic acid (ASA), and the related compounds mesalazine and olsalazine, administered orally, not be used to prevent acute radiation-induced diarrhea in patients receiving RT for a pelvic malignancy. • 13-LoE I – Recommendation against: The panel recommends that misoprostol suppositories not be used to prevent acute radiation-induced proctitis in patients receiving RT for prostate cancer. <u>Conclusion of a sub-analysis of current interventions for the management of oral mucositis in pediatric cancer patients:</u> There is limited or conflicting evidence about interventions for the management of OM in pediatric cancer patients, except for chewing gum which was ineffective for prevention. Therefore, currently, data from adult studies may need to be extrapolated for the management of pediatric patients. Honey and photobiomodulation therapy in this patient population had encouraging potential. Implementation of a basic oral care protocol is advised amid lack of high level of evidence studies.		

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Palifermin The use of recombinant human KGF-1 (palifermin) is not recommended routinely in patients treated for head and neck cancer. During treatment <u>Oral examination</u> 1. Evaluating oral hygiene: - Basic oral care will reduce the frequency and severity of oral mucositis and its associated pain (the use of soft toothbrushes and not irritating mouthwashes) - Regular oral care with the use of oral mouthwashes is recommended - The use of oral care products not containing alcohol without intense flavor is suggested - No superiority of one mouthwash over saline or bicarbonate rinses has been demonstrated - Oral prostheses should be kept clean with an antimicrobial solution and their use should be discouraged during nighttime and in presence of overt oral mucositis 2. Assessing mucositis progression: - It is recommended to regularly assess oral mucositis at least once-a-week, with instructions to the patient to communicate any further worsening of symptoms in between	Recommendations for the prevention of oral mucositis Parents and patients should be informed of the importance of keeping the mouth clean and encouraged to practice good, basic oral hygiene (✓). The following have been shown to be potentially beneficial for the prevention of mucositis in adult populations. Their use in children for the prevention of radiotherapy and/or chemotherapy induced mucositis can only be considered within the constraints of an RCT (B): - Amifostine - Allopurinol mouthwash (for 5-FU therapy) - Ice-chips - GM-CSF/GCSF - Benzydamine - Antibiotic pastilles/pastes (containing PTA) - Povidone-iodine - Pilocarpine (not currently available in a form suitable for children) - Hydrolytic enzymes RCTs of allopurinol mouthwash are not recommended for children receiving cancer treatment other than 5-FU (D). Prostaglandin E is not recommended for the prevention of chemotherapy or radiotherapy induced mucositis as there is	Pre-treatment Pain correlates with radiation treatment fields, dose and its fractioning; concomitant chemotherapy or cetuximab results in increased frequency, severity and duration of mucositis pain. These factors should be considered when evaluating the patient before the treatment and considering the possible increase in pain intensity during treatment course. When making treatment plans, the ability of a patient to tolerate increased oral pain and higher doses of opioids should be considered. Patients who are frail, elderly or who have severe concurrent medical conditions may have poor tolerance of aggressive medications regimens required to deal with severe oral pain associated with aggressive chemoradiation regimens. Treatment - In clinical practice, Numerical rating scale or verbal rating scale or visual analogue scale must be used regularly to assess background, breakthrough and swallow-related pain. - Daily pain assessment and a personalized dose and type of medications according to the intensity of pain, rescue medications improve pain	Prophylaxis - Patient education - Visit to dental surgeon before afatinib treatment - Early control - Daily oral hygiene advised Treatment Grade 1 - Therapeutic mouthwash - Bland diet Grade 2 - Therapeutic mouthwash - Soft diet - Continue afatinib at the same dose and interrupt mouthwash when mucositis resolves. - If mucositis persists for more than 2 days, interrupt afatinib and continue mouthwash. When mucositis is grade ≤ 1, restart afatinib at a dose reduced by 10 mg to a minimum of 20 mg/day. Grade ≥ 3 - Interrupt afatinib, continue therapeutic mouthwash, initiate antibiotic prophylaxis in immunocompromised patients. - Restart afatinib at reduced dose when mucositis is grade ≤ 1 - Afatinib must be permanently discontinued if mucositis does not resolve to grade ≤ 1 within 14 days in spite of optimal	Patients with grade 1 stomatitis/mucositis (erythema of the mucosa) can usually continue the EGFR-TKI at the current dose. Oral rinses (0.9 % saline or sodium bicarbonate) can soothe the mouth and only non-alcoholic mouthwashes should be used. Prophylaxis against fungal, viral and/or bacterial infections can be considered; infections must be treated as appropriate with topical or systemic antimicrobials, as recommended in local guidelines. For grade 2 stomatitis/mucositis, it may be necessary to stop the treatment or, if the SPC recommends it, reduce the dose. In the UK, it is common practice to reduce the dose of gefitinib with administration of a tablet every other day, although this is not advised in the SPC and there are no data to support this dosing schedule. EGFR-TKI should be restarted when the stomatitis/mucositis has improved to grade ≤ 1. Topical anaesthetics, mucosal coating agents and/or benzydamine HCl may be administered as needed for pain relief. Infections should be treated with topical or systemic antimicrobials. Obtaining specialist advice should be considered. In the case of a grade 3 stomatitis/mucositis,	There are no trials investigating the management of EGFR-TKI associated mucositis, thus guidance for prevention and treatment was informed by current approaches to the management of cytotoxic chemotherapy and radiation therapy-induced mucositis as described in the MASCC guidelines. PREVENTIVE <u>Recommended</u> Topical: - Benzydamine (not FDA approved) II B, Studied in radiation therapy alone; not available in USA - Steroids III B, For EGFR-TKI dermatitis; consensus of experts - Cryotherapy (ice chips) I A For short half-life bolus chemotherapy - Low-level laser therapy II B Suggested; more studies needed Systemic: - Patient-controlled analgesia for oral mucositis pain, II B Consensus of experts Miscellaneous: - Radiation blocks, IMRT IV D Consensus of opinion with radiation therapy <u>Not Recommended</u> Topical: - Antimicrobials (chlorhexidine, lozenges) II B, Studied in radiation

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examinations. When once-weekly irregular assessment instead of daily scoring was evaluated, the incidence of mucositis was underestimated. Whether more frequent assessment generates improved control of OM needs to be confirmed. Not-recommended practice: - Cryotherapy it is not recommended in head and neck cancer patients during (chemo)radiation due to the risk of less tissue oxygenation occurring with vasoconstriction that could impact on treatment efficacy and due to lack of data in this setting, even it was found to be beneficial in patients receiving bolus 5-FU or high dose melphalan - Amifostine is not recommended in patients receiving radiotherapy ± chemotherapy for head and neck cancer, because of its side effects and high cost - Glutamine is not recommended to prevent OM in HNCPs ± CT. The following topical agents are not recommended for mucositis prevention and treatment: - Barrier agents such as sucralfate, GelClair®,	evidence that it may promote mucositis (B). i.v. folinic acid is not recommended for the routine prevention of chemotherapy or radiotherapy induced mucositis as there is evidence that it may promote mucositis (B). However, i.v./oral folinic acid may be used for the prevention of toxicity following methotrexate (✓). There is no evidence to support or refute the use of folinic acid mouthwash for the prevention of mucositis. There is no evidence to support the use of the following agents for the prevention of chemotherapy or radiotherapy induced mucositis in children (B): - Lozenges containing bacitracin, clotrimazole, and gentamicin (GCoG) - Propathelene - Chlorhexidine - Fluconazole - Amphotericin B - Sucralfate - Prednisone - Glutamine - Pentoxifylline - Na-sucrose gel - Traumeel - Chamomile Their use in children for the prevention of radiotherapy and/or chemotherapy induced mucositis can only be considered within the constraints of an RCT.	control. - Increasing evidence supports the importance of continued swallowing effort during and after the course of radiation in order to minimize disuse atrophy and fibrosis and to optimize long term swallow function. Adequate pain management to prevent and to treat the symptom may substantially enhance swallow effort. - Basic oral care will reduce the frequency and severity of oral mucositis and its associated pain. - Treatment of painful mucositis may benefit from topical and systemic drugs. - However, the use of an opioid-based systemic pain control program is almost always necessary for pain relief. - Aggressive measures to prevent and treat opioid-induced side effects is critical in order to optimize patient compliance with pain regimens. - Topical coating agents may reduce local mucosal sensitivity. - Topical anaesthetics (e.g., Lidocaine 2%) alone or as mixture mouthwashes may be effective but with a short duration of effect (15–30 min). - Topical morphine-based mouthwashes is effective	supportive care and treatment interruption Interruption of afatinib in grade 1 or 2 mucositis is not recommended. Instead, grade 1 stomatitis/mucositis should be treated with thyme, sodium bicarbonate, or plantain mouthwash, as well as hyaluronic acid products and dexamethasone mouthwash. For grade 2 stomatitis, panel members proposed using specific, therapeutic mouthwashes before and after meals. Before meals, lidocaine is indicated as it anesthetizes the oral mucosa, thus partly relieving any pain induced by food intake. Panel members recommended a viscous master formula of lidocaine 2% in Orabase®. Acetaminophen syrup before meals can also be indicated to reduce any mouth soreness. After meals, triamcinolone acetonide is recommended because of its anti-inflammatory effect on oral mucosa. A master formula of triamcinolone acetonide 0.1% in Orabase® should be used after rinsing the mouth. For isolated aphthous ulcers, betamethasone/ gentamicin cream should be applied directly over the ulcer for 5 min twice a day. The antiinflammatory effect of doxycycline can also be	treatment with an EGFR-TKI should be discontinued and the patient is usually hospitalised to receive supportive care. Appropriate pain relief and antimicrobials should be administered. The EGFR-TKI can be restarted, at a lower dose as per the SPC, once the toxicity has resolved to grade ≤1. If grade 4 stomatitis/ mucositis develops, a specialist dermatology assessment should be sought, especially if Stevens-Johnson Syndrome is suspected. EGFR-TKI therapy should have already been discontinued and restarting treatment at a reduced dose should only be attempted after complete resolution of toxicity and a careful assessment of the patient. ALGORITHM (figure 4): Grade 1 toxicity (erythema of mucosa): continue EGFR TKI at current dose. 0.9% saline or sodium bicarbonate rinses. Use non-alcoholic mouthwash. Consider prophylaxis against fungal, viral and/or bacterial infections. Treat infections as necessary with topical or systemic antimicrobials. Refer to alert box in SPC. Grade 2 toxicity (patchy ulcerations or pseudomembranes): consider dose interruption or reduction of EGFR TKI if intolerable for patient (check	therapy alone; not available in USA - Azelastine, chamomile, coating agents, traumeel, tretinoin cream IIIa C Insufficient evidence for guideline Systemic: - Antimicrobials (antiviral, antifungal, antibacterial) II B - Consensus of experts - Palifermin (Kepivance) I A - Recommended for autologous HCT only - Pentoxifylline II B - Not recommended in HCT TREATMENT Recommended Systemic: - Antibiotics (radiation and EGFR dermatitis) II/II B - Consensus of experts - Doxycycline, II/II B - Consensus of experts Not Recommended Topical: - Coating agents II B - Insufficient evidence for guidelines; consensus of experts - Antimicrobials (chlorhexidine) II B - Insufficient evidence for guidelines; consensus of experts - Steroids, Traumeel, Tretinoin, Nonsteroidals, Prostaglandin, IIIa D - Insufficient evidence for guidelines; consensus of experts - Hematopoietic growth factors (GCSF, GM-CSF)

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MuGard® and Mucotrol® - Allopurinol gel - Chlorhexidine digluconate mouth rinse - Povidone-iodine - Triclosan mouth washes - Isegran mouth washes - Aloe vera - Granulocyte macrophage colony-stimulating factor - Pure natural honey - Misoprostol and Prostaglandin E2 - Antibiotic + antifungal pastilles (containing polymixin, tobramycin and amphotericin or bacitracin, clotrimoxazole and gentamicine) Benzydamine mouthwashes: - Although, the beneficial effects need to be confirmed in larger trials, suggestions are possible about benzydamine mouthwashes to prevent radiation-induced mucositis in HNCPs receiving moderate-dose radiation therapy (up to 50 Gy) without CT. - However, since no direct comparison has been performed with saline or bicarbonate rinses, either agent can be suggested. Systemic employment of antibiotics or antiviral agents is not recommended with prophylactic intent in absence of neutropenia; on the other side they are	Recommendations for the treatment of oral mucositis Appropriate pain control is recommended and the continuation of good hygiene, as tolerated (✓). Pain associated with mucositis can be severe. Opiates are required for the control of such pain (✓). RCTs of patients-controlled analgesia versus continuous infusion for controlling oral pain in children are required (B). The following have been shown to be potentially beneficial for the treatment of mucositis in adult populations. Their use in children receiving radiotherapy and/or chemotherapy can only be considered within the constraints of an RCT (B): - Vitamin E - Immunoglobulin - Allopurinol mouthwash (for 5-FU therapy). RCTs of allopurinol mouthwash are not recommended for children receiving cancer treatment other than 5-FU (D). There is no evidence to support the use of the following for the treatment of chemotherapy or radiotherapy induced mucositis in children (B): - Benzydamine - Chlorhexidine	for relieving pain with extended duration (4–6 h) and it is probably more effective than topical lidocaine. - Topical fentanyl prepared as lozenges is not effective and its use should be avoided. - Topical capsaicin may desensitize pts prior to the onset of mucositis but it is poorly tolerated and has no place in clinical practice. - Even if mouthwashes of doxepin (tricyclic antidepressant) 0.5% have shown to reduce pain for 4 h or longer, there is no wide application in clinical practice, because no confirmation trials have been published yet. Systemic drugs The WHO describes the principles of pain management and the analgesic ladder indicates the management of pain according to the type and intensity of pain experienced by the patient - Patients often experience difficulty with swallowing during and after surgery or radiation-based treatments. Under these circumstances, transdermal fentanyl can provide consistent and effective pain relief. - An effective pain regimen should include a fixed and breakthrough medication with an appropriate dose and schedule for each.	beneficial, even when the triturated drug is applied over the sore.	SPC). Note: gefitinib is often dosed every other day, although this is not recommended in SPC. Topical anaesthetics, mucosal coating agents and/or benzydamine HCl as needed for pain relief. Treat infections as necessary with topical or systemic antimicrobials. Consider specialist advice. Grade 3 toxicity (confluent ulcerations or pseudomembranes; bleeding with minor trauma): discontinue EGFR TKI and only reinstate when AE has resolved to Grade ≤ 1. Hospitalisation is usually indicated. Administer appropriate pain relief. Grade 4 toxicity (tissue necrosis; significant spontaneous bleeding; life threatening consequences): EGFR TKI should have been discontinued by now. Refer for specialist assessment (concern about potential Stevens Johnson Syndrome). Only reinstate EGFR TKI after complete resolution and careful assessment. SUMMARY OF HEALTHCARE PRODUCTS SUITABLE FOR USE IN PATIENTS WITH MUCOSITIS: Prevention of mucositis - Review drug history - Dental review (pre-treatment) - Baseline bowel habit	III B Not recommended Systemic: Pentoxifylline II/II B Consensus of experts <i>A : Non-EGFR cancer treatment study</i> <i>B : EGFR study</i>

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
recommended in case of overt infection Antimycotic mycostatin or topical miconazole for prevention: - Fluconazole can be suggested only in therapeutic setting or with a prophylactic intent in case of patients at high risk of mycosis (chronic steroidal therapy, diabetes). No-suggested practice: - No suggestions are possible for topical steroids use in patients receiving radiotherapy +/- chemotherapy for head and neck cancer. - Systemic continuous employment of steroidal therapy for mucositis prevention/treatment is not recommended. - A number of NSAIDS have been evaluated for oral mucositis, including systemic indomethacin and aspirin. - No suggestions is possible about their use in patients receiving radiotherapy +/- chemotherapy for head and neck cancer. Low Level Laser Therapy can reduce OM, but vigilance remains necessary and no recommendation is possible.	- Sucralfate - Tetrachlorodecaoxide 'Magic' (lidocaine solution, diphenhydramine hydrochloride and aluminium hydroxide suspension). Their use in children for the treatment of radiotherapy and/or chemotherapy induced mucositis can only be considered within constraints of an RCT.	- Odynophagia should be considered as incidental breakthrough pain to be treated with appropriate rescue medications Preventive administrations of rescue short release medications with a short half hour before eating may improve swallow function. - Transmucosal intranasal route administration of fentanyl is a rational approach to odynophagia treatment. - Mucositis is frequently associated with a neuropathic pain. Even if high doses of gabapentin have been reported to reduce the need for high total dose of opioids, neuropathic pain control remains a critical item with very frequent failures.		review - Soft bristle toothbrush - Maintain adequate oral fluid intake (1.5 l/day) - Ice cubes/ice chips/ice lollies (including for secondary prophylaxis) - Limit consumption of tobacco, alcohol, acidic food, spicy food and hot foods/beverages - Avoid alcohol-based mouthwashes - Primary prophylaxis: Caphosol (mixed as directed) 15 ml mouthwash 4–10 times daily as required (where available) - Secondary prophylaxis: Gelclair 15 ml mouthwash TDS Treatment of oral mucositis - Suitable antacid therapy—see local formulary - Saline mouth wash 10 ml QDS (mix 1 teaspoon of table salt into 500 ml water) - Sodium chloride mouthwash compound BP (contains bicarbonate) 10 ml QDS (mix 1 teaspoon of table salt and three-quarter teaspoon of bicarbonate of soda [baking soda] into 500 ml water) - Saline-peroxide MW 10 ml QDS - Hydrogen peroxide mouthwash BP—can be prescribed, 15 ml (diluted in 250 ml water) BD-TDS - Peroxyl mouthwash is available OTC 10 ml QDS	

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
				• Benzydamine 0.15 % mouthwash 15 ml QDS • Benzydamine 0.15 % mouthwash spray 4–8 sprays every 1.5–3 h • Antacid and oxcetacaine 15 ml mouthwash QDS (before food) • Caphosol mixed as directed 15 ml mouthwash 4–10 times daily as required (where available) • Sucralfate 1 g QDS (before meals) • If oral candida: nystatin suspension 1 ml QDS for 7 days (oral local formulary alternative—caution: check potential interactions with EGFR-TKI) • Systemic antifungal as required • Systemic antibacterial as required • According to local formulary. Caution: check potential interactions with EGFR-TKI <i>Nocte at night, mane in the morning, QDS four times daily, TDS three times daily, BD twice daily, OTC over the counter</i>	

8. Conduite thérapeutique – Interventions en soutien au traitement pharmacologique

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Mucositis caused by chemotherapy and/or head & neck radiation : Basic oral care is key in preventing and reducing oral injury; educating the patient regarding oral hygiene is thus very important. A comprehensive Basic Oral Care protocol is outlined in Table 1. McGuire et al. concluded that, due to inadequate and/ or conflicting evidence, no guidelines for the prevention or treatment of oral mucositis were possible for the interventions of dental care, normal saline, sodium bicarbonate, mixed medication mouthwash, chlorhexidine in patients receiving chemotherapy or haematopoietic stem cell transplant, or calcium phosphate. <u>Based on this conclusion, no recommendation in favour of normal saline mouthwashes is possible. Rather, plain water can be used; this approach is typically well tolerated by patients and may promote patient adherence to basic mouth care practices.</u> mTOR inhibitor-associated stomatitis (mIAS): <u>Comparable measures can be followed for basic oral care in patients on targeted therapy, with one exception. With targeted agents, saline-containing mouthwashes should be used instead of plain water because of the microbial burden that is considered to intensify formation of oral injury in this population.</u> There is currently no systemically derived evidence for this approach, but since targeted therapies are associated with inflammation and localised and systemic infections,	Ø	Ø	Ø	Ø

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
this mucosal hygiene approach may be considered until a more comprehensive, evidence-based approach has been developed. It thus seems clinically prudent to optimise oral mucosal hygiene by utilising saline-based oral rinses. As is the case with other types of oral mucosal injury caused by cancer therapy, patient education relative to types and management of oral mucosal injury caused by mTOR inhibitors is of prime importance to reducing severe oral ulcerations, maximising patient compliance, and clinical outcomes. Example of a Basic Oral Care Protocol (expert opinion): Two key strategies for mitigation of oral mucosal injury before and during treatment are: • Maintenance of optimal nutritional support throughout the entire period of cancer therapy. • Developing a daily oral hygiene routine, including brushing teeth and the gums four times a day with a soft brush and using mouth rinses. This approach can contribute to the reduction and, ideally, prevention of oral tissue injury and associated pain, nutritional compromise, and related adverse outcomes. The following information is presented as a portfolio of patient-based instructions for which health professional guidance is recommended. General measures: • Inspect your oral mucosa daily.				

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
• Have your dental team eliminate sources of trauma (e.g. ill-fitting prostheses; fractured teeth). • Lubricate lips with (sterile) vaseline/white paraffin (petrolatum), lip balm, or lip cream. Be aware that vaseline/white paraffin (petrolatum) should not be used chronically on the lips, as this promotes mucosal cell dehydration and is occlusive leading to risk of secondary infection. • Drink ample amount of fluids to keep the mouth moist. Brushing teeth and gums: • Use a soft toothbrush or swab (as tolerated) after meals and before sleep. Brushing with a soft toothbrush reduces risk of bleeding. Each month you should utilise a new soft toothbrush. • Clean the dentition and gingiva with a mild fluoride-containing, non-foaming toothpaste. • Brush teeth twice a day (after meals and at bedtime) according to the Bass or modified Bass method. If using an electric toothbrush, utilise the techniques cited in the product description instead. • Rinse the brush thoroughly after use with water and store the toothbrush in a cup with the brush head facing upward. • If you are used to do so, clean the area between the teeth once a day. Consult a dental hygienist/dentist about the most appropriate interdental cleaner (floss, toothpick, brushes). In case you are not used to use interdental cleaners on a regular base, do				

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
not start with it while on cancer therapy, since it can break the epithelial barrier, visible through gingival bleeding. Rinse mouth: - Rinse mouth with an alcohol-free mouthwash upon awakening and at least four times a day after brushing, for ~1 min with 15 ml mouthwash; gargle; and then spit out. During the first half hour after rinsing, avoid eating and drinking. Denture care: - Remove dentures before performing oral care. Brush dentures with toothpaste and rinse with water; clean the gums. - Defer wearing dental prostheses as much as possible until the lining tissues of your mouth are healed. If in the hospital, soak the denture for 10 min in an antimicrobial solution (e.g. chlorhexidine 0.2% if available) before inserting in your mouth. Avoid painful stimuli: - Smoking - Alcohol - Certain foods such as tomatoes, citrus fruits, hot drinks and spicy, hot, raw, or crusty foods.				

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Pre-treatment <u>Oral hygiene</u> • Patient education in oral hygiene techniques is of utmost important: using a soft toothbrush and floss or an interproximal brush, and fluoridated toothpaste to be continued on a lifelong basis <u>Dental examination</u> • Control of the pre-existing periodontal and dental disease and a pre-treatment professional dental cleaning may allow a better control of OM • It is recommended that a qualified oral health care team be integrated in a multidisciplinary approach on the basis of well-defined protocols for the pre-treatment, treatment and the follow-up phases.	Recommendations for oral hygiene at diagnosis and during cancer treatment Oral hygiene should be given to children and parents prior to commencing cancer treatment and this should be provided both verbally and in writing (✓). Oral hygiene advice should be given by a designated member of the dental team or, in the absence of a dentally trained individual, a member of the medical or nursing team who has received appropriate training (✓). Advice should be to brush at least twice daily, with a fluoride toothpaste (containing 1,000 ppm fluoride +/- 10 %). The toothbrush should be for the sole use of the child and changed on a 3-monthly basis, or when bristles splay earlier. If the child has a sore mouth a soft brush with a small head should be use (✓). For children up to the age of 6 years, parents/carers should be instructed on how to brush their child's teeth (✓). For babies without teeth, parents/carers should be instructed on how to clean the mouth with oral sponges. The sponge should be moistened with water (✓). For children where it is not	Ø	Patient should be advised to avoid alcohol, hot food and beverages, and spicy food. Regarding dental hygiene, a soft-bristle brush, sodium bicarbonate and alcohol-free mouthwash should be used, with special care paid to dentures as they may induce oral sores. A visit to a dental surgeon prior to the onset of therapy is highly recommended in order to detect and treat any infection or denture problems, although tartar removal should be avoided.	Patient education about the risk and causes of stomatitis/ mucositis is essential before starting therapy. Patients must be aware of the need to alert a healthcare professional at the first signs of stomatitis/ mucositis. Maintaining good oral hygiene is essential; non-alcoholic mouthwashes are recommended. It may be necessary to evaluate the use of dental appliances (braces, dentures, retainers, etc.) before therapy begins, as they can aggravate oral mucositis. Patients should be advised to eat food that will not cause oral lesions, i.e. soft, moist, nonirritating food that is easy to chew and swallow. Patients should drink plenty of water and lip balms can help to reduce mouth dryness. ALGORITHM (figure 4): Prevention: eat soft, moist, non-irritating food that is easy to chew and swallow. Cook food until soft; serve at room temperature or cold. Avoid acidic, spicy, salty rough/coarse food. Supplement meals with high calorie/high protein drinks. Drink plenty of water. Use lip balm for dry lips. Numb mouth with ice chips or ice pops as needed. Practice good dental and mouth hygiene. Use non-alcoholic mouthwash. Evaluate use of dental appliances (braces, dentures, etc.)	Ø

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
	possible to brush teeth, parents/carers should be instructed on how to clean the mouth with oral sponges, as a temporary measure. The sponge should be moistened with water or an antimicrobial agent such as diluted chlorhexidine (✓). Additional aids, such as flossing, and fluoride supplements should be prescribed only according to risk assessment by a member of the dental team (✓). The need to restrict sugary food and drink to mealtimes only should be emphasised (C). Recommendations for dental/oral care during cancer treatment A dental assessment should be undertaken every three to four months by a member of the dental team (✓). The dental team should be consulted of any dental, or difficult to manage oral problems arising during cancer treatment and the cancer team should be informed of the type and extent of dental treatment required (✓). If there is not a dedicated dental team there needs to be clear communication between the cancer team and the routine dental provider (✓).				

9. Informations à transmettre à la personne atteinte, son proche aidant ou l'équipe de soins

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Ø	Ø	Ø	Ø	Cancer treatment can cause redness, sores or infection in your mouth. This problem is called oral mucositis. It can be painful and make it hard to eat. Check your mouth each day for redness, swelling, sores or white patches. Tell your doctor or nurse if you have any of these problems. What works for oral mucositis: - Do routine mouthcare each day. This is the best way to prevent and treat oral mucositis. Studies have shown that making this part of your daily routine works. Start before you have any problems: - Brush your teeth with a soft toothbrush after each meal and before bed. - If you floss your teeth, continue to do so, unless you have been told not to by your doctor or nurse. - Rinse your mouth at least 4 times a day. Do this after meals and before bed with the mix shown below. Do this more often if your mouth is sore, you have thick mucus, or you have been told to do so. Mouth rinse mixture - Mix 1 teaspoon baking soda and 1 teaspoon of salt in 4 cups of water and shake. - Swish around in your mouth, gargle and then spit out. - Put in a covered container and keep at room temperature. - Throw it away and make a new batch each day. - Use a moisturizer on your lips that does not contain glycerine

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
				or petroleum jelly. These will make your lips drier. • Don't use mouthwash that contains alcohol because it can cause more pain and irritation. • If you wear dentures or other oral devices - Keep them out as much as you can - Brush and rinse them after meals and before bed - Soak them in cleansing solution for at least 8 hours Things that might help: • Don't smoke or drink alcohol. • Don't eat spicy, acidic (such as grapefruit), very hot or rough foods (such as chips or nuts). These can cause more irritation. Eat soft foods. • If you are using pain medicine, take it before you eat. • If you are using oral gels for short term pain relief, be aware they can make it hard for you to swallow. Be careful you don't choke. • Drink plenty of water and other fluids to keep your mouth moist. Other information: • Ask your cancer doctor if you should see your dentist before you start treatment. • Many home remedies, herbal supplements and mouth rinses have been studied to see if they can prevent or treat oral mucositis. None have been shown to work. Don't use any other remedies unless you talk to your doctor or nurse first. • If you are having trouble eating tell your doctor or nurse. Ask if seeing a dietician

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
				or if taking a diet supplement might help. • With some types of chemotherapy, sucking on ice before and during treatment, called cryotherapy, helps prevent mucositis. Ask your doctor or nurse if this works for the type of chemotherapy you are getting.

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Ø	Ø	Ø	Patient should be informed of alarm signs and be instructed to call if mucositis appears. Written instructions should be given.	ALGORITHM (figure 4): Provide patient education about stomatitis/mucositis before EGFR TKI treatment starts and throughout treatment period; stress the need to alert healthcare professional (HCP) if stomatitis/mucositis develops	Ø

10. Suivi – Appréciation de l'efficacité et de l'innocuité du traitement et de l'absence de complication

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Ø	Ø	Ø	Experts do not recommend patients generally gargle or swallow lidocaine for 2 reasons: 1) it can reduce the gag reflex and make the patient vulnerable to an aspiration pneumonia and 2) it will lead to systemic uptake and the safety of this has not been established. Inadequate data are available regarding maximum dose, but many physicians believe that 25 ml per day is within safe limits.	Ø

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Ø	Ø	Ø	Ø	Ø	Ø

11. Suivi – Modalités de suivi

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Ø	Ø	Ø	Ø	Ø

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Ø	Ø	Ø	Ø	Ø	Ø

12. Situations qui exigent une investigation supplémentaire ou une réévaluation

ESMO 2015	KCE 2012	MASCC/ISOO 2020	NCCN 2008	ONS 2019
Ø	Ø	Ø	Ø	Ø

De Sanctis 2016	CCLG/PONF 2010	Mirabile 2016	Arriola 2015	Califano 2015	MASCC/STSG 2011
Ø	Ø	Ø	Grade ≥ 3 (or grade 2 not responding to treatment) : refer patient to dermatology service	In the case of a grade 3 stomatitis/mucositis, treatment with an EGFR-TKI should be discontinued and the patient is usually hospitalised to receive supportive care. If grade 4 stomatitis/ mucositis develops, a specialist dermatology assessment should be sought, especially if Stevens-Johnson Syndrome is suspected.	It is vital that the treatment team seek input from wound care specialists, oral health care providers, and dermatologists for specific and severe toxicities.

Tableau E-2 Niveaux des recommandations des GPC

ESMO 2015

RECOMMENDATIONS IN FAVOR OF AN INTERVENTION	strong evidence supports effectiveness in the treatment setting listed.
SUGGESTIONS IN FAVOR OF AN INTERVENTION	weaker evidence supports effectiveness in the treatment setting listed.
SUGGESTIONS AGAINST AN INTERVENTION	weaker evidence indicates lack of effectiveness in the treatment setting listed.
RECOMMENDATIONS AGAINST AN INTERVENTION	strong evidence indicates lack of effectiveness in the treatment setting listed.

KCE 2012

Levels of evidence according to the GRADE system

Quality level	Definition	Methodological Quality of Supporting Evidence
High	We are very confident that the true effect lies close to that of the estimate of the effect	RCTs without important limitations or overwhelming evidence from observational studies
Moderate	We are moderately confident in the effect estimate: the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different	RCTs with important limitations (inconsistent results, methodological flaws, indirect, or imprecise) or exceptionally strong evidence from observational studies
Low	Our confidence in the effect estimate is limited: the true effect may be substantially different from the estimate of the effect	RCTs with very important limitations or observational studies or case series
Very low	We have very little confidence in the effect estimate: the true effect is likely to be substantially different from the estimate of the effect	

Strength of recommendations according to the GRADE system

Grade	Definition
Strong	The desirable effects of an intervention clearly outweigh the undesirable effects, or clearly do not
Weak	The desirable effects of an intervention probably outweigh the undesirable effects, or probably do not

MASCC/ISOO 2020

TABLE 1. Criteria for Each Level of Evidence

I	Evidence obtained from meta-analysis of multiple, well-designed, controlled studies; randomized trials with low false-positive and false-negative errors (high power).
II	Evidence obtained from at least 1 well-designed experimental study; randomized trials with high false-positive and/or false-negative errors (low power).
III	Evidence obtained from well-designed, quasi-experimental studies such as nonrandomized, controlled single-group, pretest-posttest comparison, cohort, time, or matched case-control series.
IV	Evidence obtained from well-designed, nonexperimental studies, such as comparative and correlational descriptive and case studies.
V	Evidence obtained from case reports and clinical examples.

Adapted from Somerfield MR, Padberg JR, Pfister DG, et al. ASCO clinical practice guidelines: process, progress, pitfalls, and prospects. *Class Pap Curr Comments*. 2000;4:881-886.²¹

CCLG/PONF 2010

Table 1 – SIGN grading system for levels of evidence.¹³

1++	High quality meta-analyses/systematic reviews of RCTs or RCTs with a very low risk of bias
1+	Well conducted meta-analyses/systematic review of RCTs, or RCTs with low risk of bias
1–	Meta-analyses/systematic reviews of RCTs, or RCTs with high risk of bias
2++	High quality systematic reviews of case-control or cohort studies; high quality case-control or cohort studies with a very low risk of confounding, bias or chance and high probability that the relationship is causal
2+	Well-conducted case-control or cohort studies with a low risk of confounding, bias or chance and a moderate probability that the relationship is causal
2–	Case-control or cohort studies with a high risk of confounding, bias or chance and a significant risk that the relationship is not causal
3	Non-analytic studies, e.g. case series and cross-sectional surveys
4	Expert opinion/non-systematic review article

Table 2 – SIGN grading of recommendations.¹³

Grade	
A	At least one meta analysis, systematic review or RCT rated as 1++, and directly applicable to the target population; or a systematic review of RCTs or a body of evidence consisting principally of studies rated as 1+, directly applicable to the target population and demonstrating overall consistency of results
B	A body of evidence including studies rated as 2++, directly applicable to the target population and demonstrating overall consistency of results; or extrapolated evidence from studies rated as 1++ or 1+
C	A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or extrapolated evidence from studies rated as 2++
D	Evidence level 3 or 4; or extrapolated evidence from studies rated as 2+

For certain recommendations it was felt appropriate to grade them as 'Best Practice'; these were assigned the symbol '✓'.

Recommendations were coded as 'Best Practice' ✓.

MASCC/STSG 2011

Table 1 Levels of evidence [3]

Level I evidence is reserved for meta-analyses of randomized controlled trials or randomized trials with high power.

Level II evidence includes randomized trials with lower power.

Level III evidence includes nonrandomized trials, such as cohort or case-controlled series.

Level IV evidence includes descriptive and case studies.

Level V evidence includes case reports and clinical examples.

Table 2 Recommendation grades [3]

Grade A is reserved for level I evidence or consistent findings from multiple studies of levels II, III, or IV evidence.

Grade B is for levels II, III, or IV evidence with generally consistent findings.

Grade C is similar to grade B but with inconsistencies.

Grade D implies little or no evidence.

Tableau E-3 Échelles d'évaluation de la mucosite buccale du NCCN 2008

Table 1 Summary of WHO and NCI-CTC Oral Mucositis Scales			
	WHO Scale	NCI-CTC Clinical	NCI-CTC Functional
Grade 1	Oral soreness, erythema	Erythema	Minimal symptoms, normal diet; minimal respiratory symptoms but not interfering with function
Grade 2	Ulcers but able to eat solids	Patchy ulcerations or pseudomembranes	Symptomatic but can eat and swallow modified diet; respiratory symptoms interfering with function but not interfering with ADL
Grade 3	Oral ulcers and able to take liquids only	Confluent ulcerations or pseudomembranes; bleeding with minor trauma	Symptomatic and unable to adequately aliment or hydrate orally; respiratory symptoms interfering with ADL
Grade 4	Oral alimentation impossible	Tissue necrosis; significant spontaneous bleeding; life-threatening consequences	Symptoms associated with life-threatening consequences
Grade 5	N/A	Death	Death

Abbreviations: ADL, activities of daily living; N/A, not available; NCI-CTC, National Cancer Institute–Common Terminology Criteria; WHO, World Health Organization.

Figure E-1 Algorithme de décision du NCCN 2008

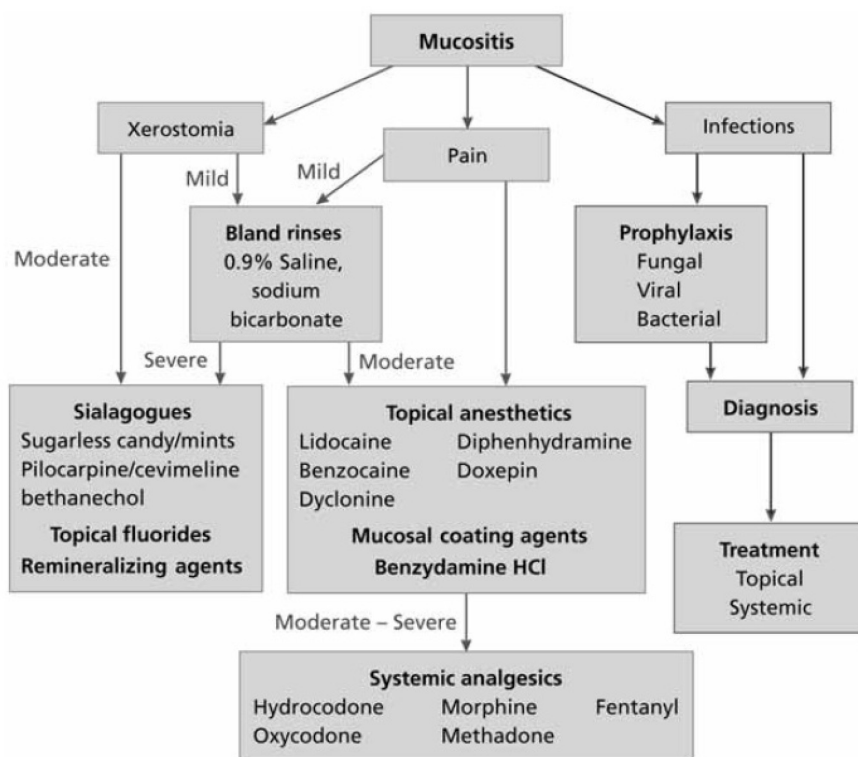


Figure 1 For most patients at risk for oral mucositis, management involves palliation of symptoms with bland rinses, topical anesthetics, mucosal coating agents, and analgesics. Strategies to manage salivary gland dysfunction and prevent infectious complications can further decrease patient discomfort and improve oral function. Courtesy of Mark Shubert, DDS, MSD.

Résultats des extractions de guides contextuels canadiens

Tableau E-4 Résultats des extractions pour les 5 documents contextuels canadiens

1. Appréciation de la condition de santé – Symptômes et signes de la mucosite buccale

AHS 2019	ROHPPA 2017	BCC 2019	CCO 2012	GEOQ 2017
It is characterized by inflammation and breakdown of the oral mucosa with the formation of erythema and painful ulcers. Several grading scales can be used based on symptom severity, or appearance, or both. One example is: ORAL MUCOSITIS GRADING SCALE NCI Common Terminology Criteria for Adverse Events (Version 4.03) Adapted from: http://www.bccancer.bc.ca/nursing-site/Documents/12.%20Oral%20Mucositis.pdf Grade 1 (Mild): Asymptomatic or mild symptoms; Intervention not indicated Grade 2 (Moderate): Moderate pain; not interfering with oral intake; modified diet indicated Grade 3 (Severe): Severe pain; interfering with oral intake Grade 4 (Life-threatening): Life-threatening consequences; urgent intervention indicated Grade 5: Death	Mucositis is defined as inflammatory and/or ulcerative lesions of the oral (pharyngeal, laryngeal and esophageal regions) and/or gastrointestinal tract. <u>Oral mucositis presents as erythema and/or ulceration of the oral mucosa.</u> The pharyngeal, laryngeal, and esophageal mucosae are also at risk for mucositis, particularly in patients undergoing head and neck radiation. It is usually very painful, requiring opioid analgesics, and impairs nutritional intake and quality of life. Gastrointestinal mucositis presents with debilitating symptoms such as pain, nausea/vomiting and diarrhea. Severe mucositis can necessitate a reduction in the chemotherapy dose or a treatment break in radiation, which can negatively influence prognosis. In addition, mucositis has a considerable economic impact due to costs associated with symptom management, nutritional support, management of secondary infection, and hospitalization. Mucositis is a highly significant, and sometimes dose-limiting, toxicity of cancer therapy. Mucositis Assessment: There are 2 widely accepted mucositis classification tools: (1) by the World Health Organization and (2) by the National Cancer Institute (NCI) Common Terminology Criteria	An acute inflammation and/or ulceration of the oral or oropharyngeal mucosal membranes. It can cause pain/discomfort, interfere with eating, swallowing and speech and may lead to infection. SYMPTOM ASSESSMENT *Consider contributing factors (risk factors listed below) Normal - Refer to pretreatment nursing assessment or dental evaluation. Onset - When did symptoms begin? Provoking / Palliating - What makes it worse? Better? Quality (in last 24 hours) - Do you have a dry mouth (xerostomia)? (e.g. decrease in amount or consistency of saliva) - Do you have any redness, blisters, ulcers, cracks, white patchy areas? If so, are they isolated, generalized, clustered, patchy?	Mucosal injury of the gastrointestinal tract (mouth to anus) associated with cancer therapy. In this Guide, <i>mucositis</i> refers only to oral mucositis. Common symptoms to screen for include oral pain, dry mouth, taste changes and difficulty with opening/closing of the mouth. Common signs to screen for include cavities, bleeding, infections, ulcerations and abnormal lesions.	La mucosite réfère spécifiquement à une inflammation causée par une chimiothérapie ou une radiothérapie.

AHS 2019	ROHPPA 2017	BCC 2019	CCO 2012	GEOQ 2017
	for Adverse Events (CTCAE) version 4.03. The latter will be endorsed by the authors of this guideline as this is the scale recommended by the Children's Oncology Group and it incorporates the collective measurement of oral symptoms, signs and functional disturbances rather than clinician-based observation. (Appendix II) NCI Common Terminology Criteria for Adverse Events (CTCAE) version 4.03: Grade 1 : Asymptomatic or mild symptoms, Intervention not indicated Grade 2 : Moderate pain; not interfering with oral intake, Modified diet indicated Grade 3 : Severe pain; interfering with oral intake Grade 4 : Life-threatening consequences, Urgent intervention indicated Grade 5: Death	Region / Radiation - Where are your symptoms? (e.g. on lips, tongue, mouth) Severity / Other Symptoms - How bothersome is this symptom to you? (0-10 scale, with 0 not at all – 10 being worst imaginable) - Have you been experiencing any other symptoms: - Fever – possible infection - Difficulty breathing – possible respiratory distress, airway obstruction - Prolonged or spontaneous bleeding from oral mucosa? Location? – possible thrombocytopenia - Dehydration - dry mouth, excessive thirst, weakness, dizziness, dark urine - Oropharyngeal pain Treatment - Have you tried any oral rinses? If so, what type? Effective? - Using any pain medications? If so, what type (e.g. topical, systemic)? Effective? - Any other medications or treatments? Understanding / Impact on You - Functional Alterations - Ability to eat or drink - Weight loss? - Taste changes (dysgeusia) - Difficulty with speech - Ability to wear dentures - Interfering with other normal daily activity (ADLs) Value - What is your comfort goal or acceptable level for this		

AHS 2019	ROHPPA 2017	BCC 2019	CCO 2012	GEOQ 2017
		symptom (0 – 10 scale)? Grade 1 (Mild): Asymptomatic or mild symptoms; intervention not indicated Grade 2 (Moderate): Moderate pain; not interfering with oral intake; modified diet indicated Grade 3 (Severe): Severe pain; interfering with oral intake Grade 4 (Life-threatening): Life-threatening consequences; urgent intervention indicated Grade 5: Death *Step-Up Approach to Symptom Management: Interventions Should Be Based On Current Grade Level and Include Lower Level Grade Interventions As Appropriate		

2. Appréciation de la condition de santé – Symptômes et signes compatibles avec d’autres conditions cliniques (diagnostic différentiel)

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
Candidiasis: Clinical appearance whitish plaques on the tongue or oropharyngeal mucosa, lesions that easily bleed and can be scraped away with a tongue depressor. Xerostomia: Abnormal dryness in the mouth characterized by a marked decrease and/or thickening of saliva, may be acute or chronic	Ø	Infection Bacterial May have inflamed oral mucous membranes, oral pain, or ulcerations Viral (e.g. Herpes Simplex Virus) May have small, raised vesicles filled with clear fluid on the lips or in mouth Fungal – (e.g. Candida) May have inflamed mucous membranes, white “cottage cheese like” patches on tongue, oral mucosa Xerostomia Abnormal dryness in the mouth characterized by a marked	Dysgeusia: abnormal or impaired sense of taste; an unpleasant alteration of taste sensation; a distortion or perversion of the sense of taste; may be described as a bitter, metallic, salty, or unpleasant taste; linked to changes in olfaction and secondary loss of pleasure derived from eating. Salivary gland hypofunction: diminished salivary flow. Xerostomia: subjective sensation of a dry mouth.	Ø

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
		decrease and/or thickening of saliva. Xerostomia from cancer therapy may be acute or chronic in nature		

3. Appréciation de la condition de santé – Symptômes et signes d’alarme

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
Ø	Ø	Ø	Ø	Ø

4. Appréciation de la condition de santé – Facteurs de risque de la mucosite buccale, antécédents médicaux, antécédents médicamenteux et habitudes de vie, pertinents à rechercher en lien avec la mucosite buccale

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
Risk factors: - Periodontal disease e.g. gum disease, trauma from ill-fitting dentures, or salivary gland dysfunction - Medications causing dry mouth e.g. anticholinergics - Smoking and Alcohol - Secondary Infection	Risk factors: - Stem cell transplantation - Chemotherapy including high dose methotrexate, anthracyclines (especially continuous infusions), etoposide and Cisplatin - Head and neck radiation - Abdominal and Pelvic radiation - Neutropenia - Poor nutrition - Reduced ideal body weight - Poor oral hygiene - Decreased saliva production for any reason	Risk factors: - Cancers of the head and neck - Radiation therapy - Radiation to head and neck, or salivary glands - Total body irradiation - Severity of mucositis related to type of radiation, dose per day, cumulative dose and extent of tissue irradiated - Chemotherapy - Most chemotherapeutic agents have the potential to cause or contribute to oral mucositis. For individual drug risk factor, see <i>BC Cancer Drug Manual</i> - Continuous or high dose chemotherapy infusions increase risk of severe oral mucositis - Chemoradiotherapy - Combined chemotherapy and radiation therapy increases risk of developing severe oral mucositis - Hematopoietic Stem Cell Transplantation (HSCT)	- Significant risk factors for the development of oral complications include the type of cancer, type of cancer treatments, cumulative doses of chemotherapy or radiation treatment, method of delivery and duration of treatment. - Predisposing medical, dental, and lifestyle factors may increase the severity of the complications. - Oral complications can significantly affect the patient's morbidity, ability to tolerate treatment, and overall quality of life. - Rigorous assessment, diagnosis and early intervention are important in preventing and decreasing oral complications. Causes of oral complications Identifying the underlying etiology is essential in determining the interventions required. The following are common causes of oral complications. (While the lists	Ø

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
		• Medications causing xerostomia may predispose to oral mucositis: - Anticholinergics (e.g. atropine, transdermal scopolamine) - Antipsychotics (e.g. chlorpromazine, prochlorpromazine, risperidone) - Antihistamines (e.g. diphenhydramine, chlorpheniramine) - Anticonvulsants (e.g. phenytoin) - Gabapentin, pregabalin - Opioids - Smooth muscle relaxants (e.g. baclofen) - Steroids (e.g. prednisone, dexamethasone) – may predispose to oropharyngeal candidiasis - Tricyclic antidepressants (e.g. amitriptyline, imipramine) • Periodontal disease: - pre-existing dental infections - gum disease - tooth decay - salivary abnormalities • Indwelling central venous catheter - may become colonized with bacteria that enter the blood during dental procedures • Immunosuppression • Age: - young children or older adults more susceptible • Females • Poor oral hygiene • Poor fitting dentures • Poor baseline nutritional status • Dehydration • Alcohol or tobacco use • Oxygen therapy Consequences: Increased Risk for: • Oral complications : pain,	below offer a number of potential causes, they are not meant to be exhaustive). Cancer Treatment Related Causes 1. Head and neck cancers (which encompasses radiation, +/- chemotherapy and surgery) 2. Systemic therapy (which encompasses chemotherapy, targeted therapy and bisphosphonates) 3. Hematopoietic Stem Cell Transplant (HSCT) +/- total body radiation. Neutropenia is a common adverse effect of systemic therapy, placing patients at an increased risk of oral mucositis and associated bacteraemia and sepsis. Non-Pharmacologic Related Causes 1. Lifestyle factors (e.g., alcohol use, tobacco use, illicit drug use). 2. Medical conditions • Immune disorders (e.g., Sjogren's syndrome, HIV/AIDS) • Malignancies • Diabetes mellitus • Transplant patients • Poor baseline nutritional status based on screening • Poor performance status • Nutrient deficiencies (e.g., B12, folic acid) • Dehydration related to reduced fluid intake, diarrhea, vomiting, diaphoresis • Oxygen therapy • Immunosuppression 3. Pre-existing dental conditions • Caries, dental infections, periodontal disease, or salivary gland abnormalities	

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
		infection (local and/or systemic), bleeding, xerostomia • Risk for severe dehydration, cardiovascular compromise, malnutrition • Airway obstruction/ respiratory distress • Treatment risks: chemotherapy/radiation therapy dose delays, reductions or discontinuation • Decreased quality of life (e.g. psychological distress, problems eating, drinking, swallowing)	• Poor oral hygiene, poor fitting dentures, fixed orthodontic appliances 4. Demographic • Age (older adults more susceptible to developing oral mucositis) • Females, due to hormonal factors • Low social economic status • Low dental health awareness Pharmacologic Related Causes • A large variety of medications may cause oral complications. • These complications could be from an adverse drug effect, related to drug interactions, or a consequence of drug metabolism. • Consultation with a pharmacist is strongly recommended for consideration of the interactions drugs might have with one another, with foods or with the specific issues of an individual patient. Examples of agents which may cause oral care problems - Mucositis Chemotherapeutic Agents: Amsacrine, dactinomycin, doxorubicin, daunorubicin, epirubicin, idarubicin, mitomycin, mitoxantrone, busulfan (high dose), 5-fluorouracil (5-FU), capecitabine, methotrexate, pemetrexed, melphalan, etoposide, irinotecan, docetaxel.	

5. Appréciation de la condition de santé – Examen physique

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
Ø	Ø	PHYSICAL ASSESSMENT Oral Assessment - Equipment required to facilitate assessment: - Adequate light source - Tongue depressor, non-sterile gloves, clean gauze - Assess lips, tongue, oral mucosa for: - Bleeding - Color – note degree of pallor or erythema, presence of white patches, or discolored lesions / ulcers - Moisture - Accumulation of debris or coating, discoloration of teeth, bad odor - Integrity – note any presence of cracks, fissures, ulcers, blisters - Perception - swallowing, changes in voice tone, taste changes Hydration Status - Assess mucous membranes, skin turgor, capillary refill, amount and character of urine Weight - Take current weight and compare to pre-treatment or last recorded weight Vital Signs - Include as clinically indicated Functional Status - Activity level/ECOG or PPS	Physical Assessment Vital Signs - Measure and monitor temperature, pulse, respiratory rate, blood pressure and oxygen saturation. Monitor pain severity using the Visual Analogue Scale (VAS) or the Numerical Rating Scale (NRS). - Measure weight and monitor weight change (Refer to Loss of Appetite Guide for more information). - Monitor hydration status - daily oral intake and output, volume, frequency and characteristics of urine, assess mucous membranes, skin turgor, and capillary refill. Oral Examination An oral examination requires an adequate light source, tongue blade, non-sterile gloves, gauze squares, and a mouth mirror. The examination should focus on the following: - Color – presence of pallor or erythema, abnormal white patches, discoloured areas. - Moisture – note any accumulation of debris or coating, teeth discoloration, bad odour, altered texture, shininess, decrease in amount of saliva, increased thickness of saliva, pooling of saliva and blood. - Oral hygiene – note accumulation of debris or coating, discoloration of teeth, bad odour. - Mucosal integrity – note any presence of mucosal abnormalities (e.g., cracks,	Ø

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
			fissures, ulcers, blisters). • Perception – note ability to swallow, changes in tone of voice and speech. Eight Steps of Physical Assessment (adapted from HPDG): 1. Extraoral examination Inspect head and neck (anterior and posterior neck). Bimanually palpate lymph nodes and salivary glands. Inspect the face (including the external ears) for skin lesions, asymmetry and masses. Asses cranial nerve function. 2. Lips Inspect and palpate outer surfaces of lip, vermillion border and corners of the mouth. Inspect and bidigitally palpate inner labial mucosa (upper and lower). 3. Buccal mucosa Inspect and palpate inner cheek lining. 4. Alveolar ridge & gingiva Inspect maxillary/mandibular gingiva and alveolar ridges on both the buccal and lingual sides. 5. Tongue Have patient protrude tongue and inspect the dorsal surface. Have patient lift tongue and inspect ventral surface. Grasping tongue with a piece of gauze and gently pulling it out to each side, inspect the lateral borders of the tongue from its tip back to the lingual tonsil region posteriorly. Palpate tongue. 6. Floor of mouth Inspect and palpate floor of mouth bimanually. 7. Hard palate Inspect and palpate hard palate for any lumps.	

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
			8. Soft palate and oropharynx Gently depress the patient's tongue with a mouth mirror, inspect the soft palate, tonsillar pillars, and oropharynx. Dental Assessment Patients, who will be undergoing chemotherapy, head and neck radiotherapy, or hematopoietic stem cell transplant, must undergo a dental assessment by a qualified dentist prior to initiation of treatment or radiation treatment planning. It is important that all healthcare providers, involved in the care of patients receiving radiation treatment for head and neck cancer, be aware of this, because a missed dental assessment/procedure will delay treatment of the disease and possibly affect patient outcome. Other dental assessments may be done by the patient's community dentist in consultation with the oncology specialist(s). Dental examination must be done as soon as possible after diagnosis, to allow time for dental procedures and adequate healing prior to treatment. If dental work is indicated, it should be carried out before treatment is started. Dental follow-up and care can be provided during active therapy.	

6. Appréciation de la condition de santé – Analyses de laboratoire

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
Ø	Mouth lesions should be swabbed for fungal culture and viral PCR (Herpes simplex virus). Remember that co-infection of mucositis induced by radiation or chemotherapy is common. Do not attribute mouth sores solely as a treatment related complication.	GRADE 2 – GRADE 3 OR <u>Not able to tolerate adequate daily fluid intake and/or presence of white patches in oral mucosa URGENT: requires medical attention within 24 hours</u> Patient Care and Assessment - Lab and diagnostic testing that may be needed: - Culture of oral mucosa - Complete blood count, electrolyte profile, blood cultures	Ø	Ø

7. Conduite thérapeutique – Traitements recommandés pour la mucosite buccale

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
Mouthwash for oral hygiene Use an alcohol-free chlorhexidine mouthwash as tooth brushing is unlikely to be adequate for plaque removal. If the mouth is too painful for cleaning with a toothbrush, oral sponges can be used with alcohol free chlorhexidine mouthwash for cleaning. Directions: Swish 15 ml in your mouth undiluted for 30 seconds, then spit out. Use after breakfast and before bedtime, avoid eating or drinking for approximately 30 minutes after its use. Preventing and relieving mild mucositis (grade 1) Benzylamine hydrochloride mouthwash (15 ml used four to eight times daily) starting before, during, and for two or three weeks after head and neck radiotherapy or chemotherapies causing	The following agents will not be discussed in this guideline as the evidence for their use is limited or unsupported in children: Amifostine, allopurinol mouthwash, GM-CSF and GCSF mouthwash, antibiotic pastes, povidine-iodine, pilocarpine, hydrolytic enzymes, prostaglandin E, antifungal lozenges, propathelene, prednisone, glutamine, pentoxifyline, Na-sucrose gel, traumeel, chamomile, bee glue, immunoglobulin, tetrachlorodecaoxide, oral amphotericin B, cephasol, sucralfate, 5-amino-salicylic acid and its related compounds mesalazine and olsalazine. ORAL CARE MANAGEMENT: All children should be advised to use a non-alcohol based mouth wash daily as part of proper oral hygiene especially during the periods of intensive therapy. The	GRADE 1 Oral hygiene Oral Rinses: - Oral rinses help keep mouth moist and clean by removing debris - Frequency and Use: - After brushing, rinse mouth a minimum of four times daily - Use 1 tablespoon (15 ml) of oral rinse, swish in oral cavity for 30 seconds, then spit out - Prepare mouth rinse solution daily to avoid risk of contamination - Recommended Bland Oral Rinses: Recipe #1: Normal saline (NS) - ½ teaspoon (2.5 ml) of salt in 8 oz (240 ml) of water Recipe #2: NS/sodium	General Oral Care: Pharmacological Interventions Pharmacological interventions for general oral care include topical anesthetics before brushing to minimize pain and the use of a non-flavoured, non-alcoholic chlorhexidine gluconate rinse to aid in plaque control and decreasing oral streptococcus mutans scores. Other pharmacologic agents used in general oral care can be divided into analgesics and agents commonly used for management of excessive secretions. The following recommendations are based on additional resources and the expert opinion of the Oral Care SMG. Analgesics: When continuous pain is present (example moderate to severe oral mucositis) an oral analgesic prescribed	Les données disponibles permettent de suggérer ces mesures : - En prévention des mucosites, l'utilisation d'un rince-bouche sans alcool quatre fois par jour chez tous les patients devant subir un traitement antinéoplasique (excluant les patients sous inhibiteur de mTOR) et pendant toute la durée de celui-ci (grade D) : a. Chez les patients traités avec de la chimiothérapie, un rince-bouche d'eau ou à base d'eau et de chlorure de sodium (sel de table) associé ou non à du bicarbonate de sodium est suggéré. b. Chez les patients traités avec une thérapie ciblée orale, un rince-bouche à base d'eau et de chlorure de

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
mucositis, to help reduce the frequency and severity of symptoms, however it contains alcohol and can sting or burn (this may be avoided by diluting with equal parts of lukewarm water prior to use). For certain chemotherapy regimens only, such as bolus 5-FU, patients will be directed by the treating team to use oral cooling (ice chips) 30 minutes prior to administration. Symptom relief (grade 2-3) In addition to the above management, "Magic mouthwash" preparations that are compounded solutions that may help with symptom relief. In Alberta, Akabutu's and Pink Lady are commonly used. THESE FORMULATIONS ARE NOT BASED ON LITERATURE, but are from unpublished data, historical use, or physician/pharmacy experience. Akabutu's mouthwash has to be compounded by pharmacies and contains: Nystatin 100,000 unit/ml 42 ml, Lidocaine HCL Viscous 2% 50 ml, Sodium chloride 0.9% 200 ml, Hydrocortisone 10 mg x 5 tabs, glycerine 100% 4 ml. Swish/gargle 15-30 ml in mouth/throat x 1 minute (spit out excess), q4-6h prn. Avoid eating or drinking for approximately 30 minutes after its use. Pink Lady is also compounded and contains: Equal parts Lidocaine viscous 2% oral solution and Aluminum hydroxide-magnesium hydroxide (Maalox, Almagel or equivalent) Swish/gargle 15 ml in mouth/throat x 1 minute (spit out excess), q4h prn, best used 20 mins prior to meals (Caution: systemic side-	authors of this guideline recommend: - Chlorhexidine 0.12% MIC (minimum inhibitory concentration): It has activity against anaerobes, facultative anaerobes and yeast. - Less than 6 years: 5 ml swab, or swish and spit twice daily 6 years and greater: 10 ml swish and spit twice daily - Leave in mouth for at least 1 minute if possible before spitting. May rinse twice over 30 seconds if preferable. - If unable to swish may apply with a soft toothbrush or gauze - Wait 30 minutes after brushing teeth to use chlorhexidine mouthwash - Avoid mouth washes with alcohol as they dry and crack already thinned tissues - Note: Paroex does not contain alcohol but Peridex does and should be avoided. TREATMENT OF MUCOSITIS: - Mouth lesions should be swabbed for fungal culture and viral PCR (Herpes simplex virus). Remember that co-infection of mucositis induced by radiation or chemotherapy is common. Do not attribute mouth sores solely as a treatment related complication. - Appropriate pain control is recommended and the continuation of good oral hygiene to reduce oral biofilm, as tolerated. - Topical anesthetics can provide short-term pain relief for oral mucositis on an empiric basis (See	bicarbonate mixture – ¼ teaspoon (1.25 ml) of salt and ¼ teaspoon (1.25 ml) baking soda in 8 oz (240 ml) of water Recipe #3: Sodium bicarbonate – ¼ to ½ teaspoon (1.25-2.5 ml) baking soda in 8 oz (240 ml) of water - Multi-agent rinses – "Magic Mouthwash" (may include a topical analgesic, a steroid, an antifungal agent, an antibacterial agent and/ or a mucosal coating agent) may be prescribed to help palliate pain; however, limited evidence to suggest superior over bland rinses - Not Recommended: - commercial mouthwashes which contain alcohol - chlorhexidine - povidone iodine - hydrogen peroxide - sucralfate - club soda - lemon glycerine swabs Lip Care: - Use water-soluble, lanolin or oil-based lubricants to protect the lips and keep moist - Apply after oral care, at bedtime or as often as required - Water based lubricants may be used during oxygen therapy and can be applied inside the mouth NOTE: Oil based lubricants (e.g. petroleum jelly) generally not recommended due to increased risk of aspiration and occlusive nature may increase growth of	regularly may be considered to allow for more thorough tooth brushing. Consult specialists in pain and palliative care as needed. Refer to the Pain Guide-to-Practice for more information regarding opioid prescribing. - When appropriate, oral opioid analgesics are preferably given 60 minutes before brushing. - Topical anesthetics (e.g., viscous lidocaine 2% or viscous xylocaine 2%, 2-5 ml) may be applied 10 minutes before eating to provide enough comfort for the person to be able to eat or drink. An alternative would be to take an oral analgesic 1 hour prior to eating. - For cognitively intact head and neck cancer patients receiving radiation therapy, 2 to 5 ml of viscous lidocaine 2% may be swallowed, up to a maximum of 6 times per day, to allow for adequate hydration, nutrition and oral care. This advisement would be at the discretion and recommendation of the patient's most responsible physician. - If topical anesthetics are used only for rinsing of the oral cavity, without swallowing, then the recommended maximum dose of viscous lidocaine 2% is 60 ml per day. - If patient is allergic to lidocaine, dyclonine 0.5 to 1% may be used (5 ml q6-8	sodium (sel de table) est suggéré (voir section 4 – Information pour le patient). - En prévention des mucosites chez les patients recevant un inhibiteur de mTOR, un rinçage-bouche de dexaméthasone 0,1 mg/ml 4 fois par jour pour les 8 premières semaines de traitement, pourrait être considéré (voir section 4 – Information pour le patient) (grade C). - Si nécessaire, un rinçage-bouche de morphine 2 % ou de doxépine 0,5 %, pour le traitement de la douleur associée (grade C). Chimiothérapie Étant donné les résultats contradictoires et la faible qualité méthodologique des différentes études retenues, aucun organisme international ne recommande l'utilisation d'un rinçage-bouche à plusieurs ingrédients pour le traitement de la mucosite (1, 3, 18). De plus, ces recettes comprennent souvent un agent visqueux (hydroxyde d'aluminium et de magnésium, sucralfate) pouvant laisser des résidus sur la muqueuse buccale et rendre le nettoyage plus difficile (21). Ces agents pourraient contribuer à la carie dentaire en raison de leur forte teneur en sucre (21). Étant souvent mal entreposés et propices à la prolifération bactérienne, ils pourraient augmenter le risque infectieux. D'autre part, l'utilisation à long terme de corticostéroïdes topiques pourrait contribuer aux candidoses orales (19, 21). Finalement, l'utilisation de la

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
effects of lidocaine, including fatal arrhythmia) Severe Mucositis (grade 3-4) In addition to the above management suggestions: - Consider systemic opioids (see pain tips) or a topical opioid mouthwash obtained from a compounding pharmacy, e.g. 0.2% morphine mouthwash (i.e. morphine diluted in water to 2 mg/ml), hold 10 ml in mouth next to painful areas for 2 mins then spit out, q4h prn. (Caution: patient not to swallow the mouthwash because of the systemic side effects. 10 ml of the rinse contains 20 mg morphine) - Consider use of 2% lidocaine viscous solution orally, 15 ml swish x1 minute and spit, or for pharyngeal mucositis gargle and spit/swallow, q3h prn (Caution: systemic side-effects of lidocaine, including fatal arrhythmia)	Appendix III for a list of mouth rinses and cautions for use). - Pain associated with mucositis can be severe. Opiates are often required for the control of such pain. Use the analog or faces pain scale to assess level of pain. - The Guidelines published by the American Society for Parenteral and Enteral Nutrition state that parenteral nutrition should be considered in children who cannot maintain adequate nutritional intake orally or internally for 5 to 7 days. - Oral cryotherapy (the placement of ice cubes or ice chips in the mouth and continually replenishing fresh ice during the period of cytotoxic treatment, typically 30-60 minutes). This should be offered to cooperative children receiving chemotherapy associated with high rates of mucositis. - Some groups of patients are more likely to get oral candidiasis than others. Preventative therapy is not recommended for most patients (i.e. those receiving treatment for solid tumors). A decision needs to be made by the clinician on whether to provide treatment to try to prevent oral candidiasis. - When choosing an antifungal agent for the prevention and treatment of candidiasis one that is absorbed	pathogens. Do not use inside mouth or if patient on oxygen therapy. Radiation therapy - Benzydamine Hydrochloride 0.15% (Tantum®) is an anti-inflammatory mouth rinse that is recommended for use to prevent and/or relieve the pain and inflammation associated with oral mucositis in patients who are receiving moderate doses of radiation therapy for head and neck cancer. - Amifostine is a cytoprotectant agent that may help to reduce the incidence and severity of chronic or acute xerostomia in patients who are receiving radiation therapy for head and neck cancer. - Not Recommended: - Chlorhexidine - Sucralfate - Antimicrobial lozenges Head & Neck Cancers - Brushing may not be appropriate in the area of tumor involvement - Patients should be assessed for the use of daily Fluoride tray - Consult with a dentist Cryotherapy - May decrease the incidence and severity of oral mucositis - Patients should be instructed to hold ice chips	hours, swish and swallow as needed for pain). Prevention of Oral Mucositis: Pharmacological Interventions A systematic approach to oral care should be followed to reduce the amount of microbial flora, reduce pain and bleeding, prevent infection and reduce the risk of dental complications. There is no evidence of benefit for the use of chlorhexidine for the prevention of oral mucositis when compared with placebo or no treatment. Human Keratinocyte Growth Factors (KGF) - KGF (palifermin) was found to be beneficial for the prevention of all outcome categories of mucositis (ranging from mild to severe). - In patients with hematological malignancies receiving high dose chemotherapy and total body radiation with stem cell transplant, KGF (palifermin) in a dose of 60 mcg/kg/day for 3 days prior to treatment and for 3 days post-transplant is recommended for the prevention of oral mucositis. - KGF (palifermin) is not commonly used in Ontario due to high costs and limited availability. - Where available, it should be used for patients most likely to develop severe mucositis. - The most common side	lidocaïne topique peut supprimer le réflexe de déglutition chez certains patients et être absorbée de façon systémique en présence d'une muqueuse endommagée (19, 21). Cependant, si un rince-bouche magique doit être utilisé, les groupes d'experts suggèrent : › d'éviter la chlorhexidine (efficacité non démontrée) (1, 3, 19); › d'éviter le sucralfate (dépôt de résidus, sucré) (19); › d'éviter les ingrédients disponibles sous forme d'elixir ou contenant de l'alcool (favoriserait l'apparition des ulcères, pourrait aggraver la douleur) (19); › d'éviter les solutions à base de peroxyde pour plus de 48 h (diminution de la vitesse de guérison) (19); › d'éviter la tétracycline (ne prévient pas l'apparition des ulcères) (26, 27); › de remettre au patient des conseils sur le mode d'utilisation et la durée de conservation du rince-bouche. Il est également suggéré que la recette employée soit adaptée aux besoins du patient (26). Thérapie ciblée Les traitements proposés

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
	from the gastrointestinal tract is recommended (ex. fluconazole). If fluconazole is prescribed it should be held for 24 hours before and after Vincristine. If bridging is required for candidiasis treatment an alternate systemic antifungal may be used. Dose: Fluconazole 6-12 mg/kg/day IV/PO once daily (maximum 400 mg/day) - There is no evidence to support the use of nystatin for the prevention or treatment of candidiasis in children treated for cancer. Other antifungals may be required if fluconazole is not tolerated. • Consideration should be given to the use of saliva stimulants, artificial saliva, chewing sugar free gum (although this can increase diarrhea due to the laxative effect of sorbitol) or frequent sips of water for the relief of dry mouth. • Acyclovir is recommended for the treatment of herpes simplex virus positive children receiving chemotherapy and/or radiotherapy. - Intraoral lesions and lesions on the lip should be treated with oral acyclovir or valacyclovir - For moderate to severe cases, or where oral administration not	in mouth five minutes prior, during, and for 30 minutes after the bolus infusion of fluorouracil (5FU) NOT used for: • Infusional fluorouracil • Regimens which include Oxaliplatin due to potential exacerbation of cold-induced pharyngolaryngeal dyesthesias Hematopoietic Stem Cell Transplantation (HSCT) Recommended for prevention/reduced severity of Oral Mucositis: • Palifermin (keratinocyte growth factor-1) for patients with hematological malignancies receiving high dose chemotherapy with or without radiation therapy followed by HSCT • Oral cryotherapy to prevent oral mucositis in patients receiving high dose melphalan Not Recommended: • Pentoxifylline/Granulocyte-Macrophage Colony Stimulating Factor (GM-CSF) mouthwashes <u>GRADE 2 – GRADE 3 OR Not able to tolerate adequate daily fluid intake and/or presence of white patches in oral mucosa URGENT: requires medical attention within 24 hours</u> Oral hygiene Oral rinses: • Increase use of mouth rinses to: - Every 1-2 hours while	effects of KGF (palifermin) include mild rash and taste changes. Management of Oral Mucositis: Pharmacological Interventions Opioids: Systemic analgesia with morphine (or other strong opioid) is the recommended treatment of choice for oral mucositis pain in patients undergoing HSCT. <i>Systemic Analgesia with Opioids</i> • Regular oral pain assessment using validated self-reporting instruments is essential. • There is some evidence of benefit for the use of patient-controlled analgesia (PCA) with opioids for oral mucositis pain in patients undergoing HSCT. • There is no evidence to suggest that there is a difference in pain control between continuous morphine infusion and PCA. However, the PCA group required less morphine than the continuous infusion group and the pain lasted for 2 days less. • For pain management, please refer to Pharmacological Interventions under General Oral Care, for additional information on opioids please refer to the Pain Guide-to-Practice. Other Agents: Table 6 lists agents with insufficient evidence due to lack of clinical trials, inadequate sample	proviennent en général de recommandations d'experts et d'extrapolation des données obtenues avec la chimiothérapie (30). Le seul organisme ayant émis des recommandations à ce sujet est l'ESMO (2015) (18). En présence de mucosite, on y suggère : › d'augmenter la fréquence d'utilisation du gargarisme utilisé en prévention (jusqu'à une fréquence à chaque heure au besoin); › d'utiliser la lidocaïne visqueuse 2 % pour la douleur associée; › d'utiliser la dexaméthasone 0,1 mg/ml en présence d'ulcères; › d'utiliser un gel ou un onguent de clobetasol topique 0,05 % pour le traitement des ulcères associés aux inhibiteurs mTOR (formulation sans alcool non disponible au Canada). D'autres experts recommandent également l'utilisation de la benzydamine 0,15 % à raison de 15 ml à gargariser pendant 30 secondes puis recracher, 3 à 4 fois par jour pour la douleur et la sensibilité associée chez les patients traités avec un inhibiteur EGFR (30, 31). Cependant, la présence d'alcool dans le produit disponible au Canada rend son utilisation moins intéressante.

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	tolerated intravenous acyclovir should be used - Mucocutaneous/gingivostomatitis: ▪ Acyclovir: Children 15-30 mg/kg/day IV divided q8h or 80 mg/kg/day PO divided in 3-4 doses up to 14 days Maximum: PO 800 mg 24h (200 mg q6h) if mild to moderate and PO 1.6 grams 24h (400 mg q6h) if severe. • Consider acyclovir prophylaxis for patients with recurrent herpes: 50 mg/kg/24h PO divided q12-q6h (maximum PO 800 mg/24h OR frequent recurrences 80 mg/kg/24h PO divided q8h (maximum PO 800 mg/dose). • Either ranitidine or a proton pump inhibitor orally is recommended for prevention of epigastric pain following treatment with dexamethasone/prednisone in induction leukemia and high dose cyclophosphamide and methotrexate. • Some evidence exists for the use of low-level light therapy in cooperative children receiving chemotherapy with a high rate of mucositis. This is a consideration because this strategy requires specialized equipment and expertise and it is unknown whether it is feasible to deliver this therapy modality in routine clinical practice. Low level light	awake - Every 4 hours overnight (if awake) - Increase frequency as needed for symptom severity increases Lip care: • Continue to apply water based lubricant to protect and moisten lips <u>GRADE 4 OR Presence of the following: Temperature greater than or equal to 38°C, uncontrolled pain, blisters or cracks in oral mucosa</u> <u>EMERGENCY: Requires IMMEDIATE medical attention</u> Oral hygiene • Frequent mouth care using oral rinse and foam swab every 1-2 hours (or as tolerated) • Apply water based lubricant to lips every 1-2 hours • No brushing, flossing or dentures until symptoms resolve Appendix A: COMMON COMPLICATIONS ASSOCIATED WITH ORAL MUCOSITIS: Medications that may be prescribed for pain from oral mucositis • Oral pain can be a barrier to oral hygiene recommendations • Oral pain management is essential for palliation, to prevent further complications such as dehydration, malnutrition.	size or methodological flaws. Until additional high quality trials become available it is difficult to make recommendations for, or against, the use of these interventions. When patients develop oral mucositis, they require appropriate therapeutic intervention to manage symptoms and prevent symptom progression. Once mucositis has developed, its severity and the degree of myelosuppression govern appropriate oral management. It is suggested to use the —stepped approach (Figure 1) for mucositis management, adding agents as symptoms present	

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	therapy is based on the physiological effects of low-energy light without thermal generation. The main effect of phototherapy is anti-inflammatory, influence on wound healing and analgesic. It is typically administered intraorally, although there is some experience with external application. Palifermin (a recombinant human KGF or keratinocyte growth factor which is an epithelial growth factor; it is a 28 kD heparin-binding member of the family of fibroblast growth factors). Not enough evidence is available currently to recommend the use of this agent for children receiving standard chemotherapy. It has shown some promise in adult trials of patient receiving hematopoietic stem cell transplant. Compounded Formulations for Symptomatic Management of Mucositis: There are numerous “magic” mouthwash preparations. Most contain at least 3 ingredients. These may include an antibiotic to reduce bacterial flora around areas of mucosal breakdown, an antifungal to stop fungal growth, a local anesthetic/pain reliever, an antihistamine for local anesthetic effect, a steroid to reduce inflammation and an antacid to enhance coating of the ingredients in the mouth. Note that nystatin has not been shown to be effective in treating oral fungal infections associated with oral mucositis.	Topical Agents: May provide temporary relief in mild (Grade 1) mucositis - Analgesics (e.g. morphine, benzydamine) - Anesthetics (e.g., 2% viscous lidocaine, diphenhydramine solution) - Coating agents (e.g. magnesium or aluminum hydroxide/milk of magnesia) or a mixture of agents NOTE for local anesthetics: 1. Instruct patient to coat painful mucosal surfaces and then spit solution out- unless otherwise advised. Risk of impairing gag reflex if local anesthetic is swallowed, increasing risk of aspiration pneumonia or systemic uptake. 2. Use care with eating or oral hygiene measures when mouth is numb, to avoid trauma or accidental aspiration. Systemic Agents: - Opioid analgesics (e.g. morphine) for moderate to severe mucositis (Grade 2 – 4) - Encourage patients to use prescribed analgesics prior to meals & around the clock intervals if pain is constant - Sustained release oral doses or continuous intravenous infusions may be prescribed for severe oral mucositis - Patient Controlled Analgesia (PCA) with morphine (or other strong opioid) is recommended for patients with severe pain		

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
	Most formulations are used every 6-8 hours prn with instructions to hold in the mouth for 1-2 minutes then spit out or swallow. Patients should be instructed not to eat or drink for 30 minutes after use. Caution when recommending mouthwashes with lidocaine especially in very young children with short airways as impairment of glottal function can occur which can result in increased risk of aspiration. Also lidocaine use in very young children increases the chance of chewing and macerating mucosa which increases the chance of infection. The maximal daily dose of lidocaine should not exceed 4mg/kg. In children under 5 a mouthwash with lidocaine should be applied by swab to avoid swallowing. A) Recipe: Pain relief mouthwash known previously as "magic mouthwash" available at IWK: • diphenhydrAMINE 2.5 mg/ml Syrup (50ml) • Lidocaine 2% Viscous Solution (50 ml) • Almigel Plus Suspension (or equivalent) (50 ml) PROCEDURE: 1. Measure all ingredients. 2. Combine the diphenhydrAMINE syrup with lidocaine 2% viscous. Stir well. 3. Add the Almigel Plus suspension (or equivalent). Mix thoroughly. 4. Transfer to an appropriately sized amber container. 5. Shake well. Stable for 21 days at room temperature.			

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	Other Medications for Mucositis: (note: this is not a formulary item and would need special authorization). Consult Pediatric Oncologist. - Benzydamine (Tantum oral rinse) 15 ml held for at least 30 seconds then expelled QID prn (contains 10% ethanol so may sting or burn – may be avoided by diluting with equal parts of lukewarm water prior to use). - This product is not indicated in children under 5 years - This product may be considered for children undergoing head and neck radiation - This product has local anesthetic and anti-inflammatory properties but no antimicrobial activity			

8. Conduite thérapeutique – Interventions en soutien au traitement pharmacologique

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Provide patient information on self-care - Share patient guide with patient/family “Mouth and Dental Care for Cancer Patients”. - Ensure patient knows how to optimize their routine oral hygiene and nutrition before, during and after their cancer therapies - Help enable access to dental care if needed Review Basic Advice - Hard, acidic, salty or spicy foods can irritate the tissues. Cool or lukewarm foods and soft, pureed foods may be better tolerated. Alcohol and	ORAL CARE MANAGEMENT: - All children should undergo a dental assessment at the time of cancer diagnosis, if possible before cancer treatment begins. - If any invasive dental treatment is required, this should be undertaken by either a consultant or specialist pediatric dentist as appropriate. NOTE: avoid invasive dental procedures in patients receiving bisphosphonates. - All children diagnosed with cancer should be registered with a dentist throughout treatment.	<u>GRADE 1</u> Patient Care and Assessment- Including Dental Care - New patient baseline assessment - Nurses to screen for oral complications. Once detected, assess at each patient visit - Provide verbal and written information on maintaining oral hygiene at onset of treatment - Maintaining oral health throughout the treatment phase is necessary to: - help ensure adequate hydration and nutrition - reduce the incidence,	General Oral Care: Non-pharmacological Interventions - Good oral care is fundamental in preventing and decreasing oral complications and has the potential to modify the acute and long term sequelae of cancer therapy. - The major purposes of oral care are to maintain normal function of the oral tissues, to maintain comfort and to reduce the risk of bleeding, local infection and systemic infection. Education: Use of a uniform, systematic plan for oral care, along with standard educational approaches to help	Les données disponibles permettent de suggérer ces mesures : Un protocole d'hygiène buccale, à débiter avant le traitement, chez tous les patients devant recevoir un antinéoplasique (voir section 4 – Information pour le patient) (grade D – voir l'échelle de recommandations en annexe 2).

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tobacco should be avoided. Poorly fitting dentures or sharp teeth may exacerbate symptoms and should be corrected. Dentures may need to be refitted on more than one occasion if there is progressive weight loss. Partly edentulous elderly are at particularly high risk for poor chewing and swallowing function, so soft and pureed foods become more important for this group. Recommend alcohol-free rinsing after meals (e.g. with club soda or 1 tablespoon of sodium bicarbonate in 2 cups of water) and high fluoride content toothpaste (5000ppm) used twice daily e.g. Preident 5000 plus.	- The dentist in the community should be notified of the cancer diagnosis and arrangements for care during cancer treatment as directed by the IWK hospital dental team. - Oral hygiene advice should be given to children and parents prior to the start of cancer treatment and this should be provided both verbally and in writing. - Oral hygiene advice should be given by a designated member of the dental team or, in the absence of a dentally trained individual, a member of the medical or nursing team who has received appropriate training. Advice by the dental team will be regularly reinforced by oncology team members. - Advice should be to brush at least twice a day for two minutes, with gel fluoride toothpaste. Brushing should occur regardless of whether gums are bleeding or the hematological status. If bleeding gums are spontaneous without tooth brushing then suspect a low platelet count, however, gums that bleed during brushing are most often reflective of poor oral hygiene, biofilm and associated gingivitis. The toothbrush should be for the sole use of the child and changed on a 3 monthly basis, or sooner if bristles become damaged or oral infection occurs. A soft brush with a small head should be used. - Avoid toothettes to clean the mouth as it can disrupt the	severity and duration of oral mucositis - prevent or minimize the effects of oral complications - A dental exam and any interventions should be performed by a dentist (or oral oncology specialist) as early as possible before starting radiation or chemotherapy - Smoking cessation resources Oral hygiene Flossing: - Floss at least once daily - Do not floss if: - Causes pain or bleeding gums which does not stop after 2 minutes - Platelet count below 50, 000 mm3 or unless otherwise advised by physician - Not a routine practice prior to treatment, do not initiate flossing unless recommended by a dentist NOTE: Patients with certain head and neck cancers may not be able to floss Brushing: - Use small, extra soft nylon bristled manual tooth brush - To soften bristles, rinse toothbrush under warm water for 30 seconds - Use non-abrasive, fluoride toothpaste with a neutral taste- flavoring agents may irritate gums - Brush two to four times daily - Brush all tooth surfaces using a short circular motion or horizontal strokes - Brush tongue back to front	patients understand and cope with the symptoms of oral complications is recommended. - Multidisciplinary team involvement is important to the development and evaluation of oral care protocols, before and during all phases of treatment. - Comprehensive management plan(s) may reduce the severity of mucositis caused by chemotherapy or radiotherapy. - Patients who are to receive chemotherapy or radiation therapy should start their education about possible oral complications and preventive mouth care practices prior to treatment. - Patients should be encouraged to follow these practices during active treatment and recovery. - Oral hygiene is particularly important for any patient who is immunocompromised. An important component of oral care management is the assessment of nutritional status, including adequacy of oral solid and fluid intake. Nutritional Care: There is limited research examining effective dietary modifications for managing oral complications during cancer treatment. Due to the lack of intervention studies, current best practice of oncology dietitians is based on experience, clinical judgment and an understanding of physiology.	

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	oral mucosa. - For children up to the age of 6 years, parents/caregivers should be instructed on how to brush their child's teeth. - The tongue should be gently cleaned with a soft toothbrush. - Daily oral assessments. - Gloves should be worn by caregivers when performing oral hygiene. - Additional aids, e.g. flossing, fluoride tablets should only be given when recommended by a member of the dental team. - All inpatients should have an oral assessment daily (more frequently if clinically indicated). - An oral assessment tool such as the Oral Assessment Guide (OAG) is useful if recording the status of the oral cavity (Appendix I): - The Eilers' Oral Assessment Guide offers a valid, reliable and clinically useful tool for assessing oral status. - The OAG comprises 8 categories that reflect oral health. Each category is assessed and given a score of 1-3 (1=normal, 2=not normal but barrier intact and no loss of function, 3=barrier breakdown and function compromised). The minimum score is 8 (healthy oral cavity) and the maximum is 24 (severe mucositis). - The staff responsible for the assessment of the oral cavity should be appropriately trained in the use of the OAG. - A total OAG score greater	- Brushing should be done within 30 minutes of eating and for at least 2 minutes - Rinse toothbrush well with hot water after each use; allow to air dry - Replace toothbrush when bristles are no longer standing up straight Dentures: - Remove dentures, plates, and/or prostheses before oral hygiene performed - Brush and rinse dentures after every meal and at bedtime - Soak dentures in oral rinse solution, rinse before placing in mouth - Do not wear tight or loose fitting dentures - Allow long periods without wearing dentures, at least 8 hours daily (e.g. overnight) - If mouth sensitive, wear only during mealtime Dietary Management Promote: - Daily fluid intake of 8-12 cups (2-3 litres), unless contraindicated, to help keep oral mucosa moist (e.g. water, sugar-free popsicles, non-acidic juices, ice cubes, sports drinks, broth) - Well-balanced diet that is high in protein, vitamins B and C - The use of soft, moist, bland foods as symptoms develop - Add sauces, gravy, salad dressings, butter/margarine, broth	General Nutritional Recommendations for Oral Hygiene - Adequate nutrition and fluid intake, based on body weight, is important to maintain good oral tissue integrity. - Alcohol and tobacco can be irritating to the oral tissues and contribute to salivary hypofunction. - Therefore it is recommended to limit or stop the use of these substances. Oral Care Plans Vital factors in oral care are the frequency, thoroughness and consistency with which it is performed. To prevent complications, the frequency of care is more important than the agents employed. The following frequencies of oral care delivery, according to the patient's condition, are proposed: - World Health Organization (WHO) Grade 0: Care every 4 to 6 hours may reduce the patient's potential for infection from microorganisms. - WHO Grade 1 and 2: Care every 2 hours may reduce oral complications and may enhance patient comfort by keeping membranes moist. - WHO Grade 3 and 4: Where possible, care every hour (or more frequently) is appropriate for patients requiring oxygen therapy, patients who breathe through their mouths, patients with oral infections, unconscious patients, and patients with severe mucositis.	

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	than 8 means an increased risk of oral complications - Children with an OAG greater than 8 should be assessed to ensure appropriate analgesia is given.	or another liquid to help moisten and thin foods Avoid: • Dry or coarse foods (e.g. toast, crackers, chips) • Spicy or hot temperature foods • Highly acidic fluids and foods (e.g. lemon glycerine swabs, vitamin C lozenges) • Fluid or foods high in sugar (e.g. pop, some fruit juices) • Caffeine, alcohol, tobacco <u>GRADE 2 – GRADE 3 OR Not able to tolerate adequate daily fluid intake and/or presence of white patches in oral mucosa URGENT: requires medical attention within 24 hours</u> Oral hygiene Flossing: • Discontinue flossing if: - Causes pain - Bleeding gums which do not stop after 2 minutes - Low platelet count (below 50, 000 mm3) Brushing: • Brushing more gently with toothbrush if: - brushing causes discomfort - some bleeding occurs but stops within 2 minutes • Do not use a toothbrush if: - Brushing is too painful even with pain medication - Bleeding in oral mucosa does not stop after 2 minutes • If unable to brush, clean	General Principles of Oral Care: • Keep oral mucosa and lips clean, soft, moist and intact to prevent infection. • Remove food debris/dental plaques from teeth and gums without damaging the gingival tissue/periodontium. • Optimize oral hygiene. • Prior to commencing cancer therapy remove all fixed orthodontic appliances. • Repair ill-fitting dentures or discontinue use. • Repair, replace or recontour broken restorations on teeth to avoid injury to the tissues. • Alleviate any other pain/discomfort to enhance oral intake. • Treat acute and chronic infections of the oral cavity. • Assess for trismus (the patient's ability to open/close the mouth). - Assess for infection or potential cancer recurrence as etiology. - Consider using Therabyte™ as directed, using the 7-7-7 protocol (7 Stretches performed 7 times a day, each stretch held for 7 seconds). • The recommended rinsing solution is a bland rinse (1 teaspoon salt, 1 teaspoon baking soda in 1 liter/ 4 cups of water). The rinse should be prepared at least once daily and should not be refrigerated.	

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
		teeth with clean, moist gauze or foam swab accompanied with vigorous rinsing using recommended oral rinse solution - If there has been an oral infection, use a new toothbrush after infection has resolved Dentures: - Keep dentures out of mouth as much as possible until symptoms resolve Dietary Management - Change food texture, consistency, and temperature according to individual tolerance (e.g. puree diet) - If only liquids are tolerated, choose high calorie, high protein supplement fluids - May require oral supplementation or IV hydration if unable to maintain adequate fluid intake <u>GRADE 4 OR Presence of the following: Temperature greater than or equal to 38°C, uncontrolled pain, blisters or cracks in oral mucosa</u> <u>EMERGENT: Requires IMMEDIATE medical attention</u> Oral hygiene - Frequent mouth care using oral rinse and foam swab every 1-2 hours (or as tolerated) - Apply water based lubricant to lips every 1-2 hours - No brushing, flossing or dentures until symptoms resolve	- Following emesis, patients should be instructed to rinse mouth with the bland rinse to neutralize the mouth immediately, minimizing tooth enamel demineralization. - Patients may chew xylitol gum or suck on xylitol lozenges up to 6 grams a day. - While there is no evidence to recommend either for or against the use of club soda, the Oral Care SMG suggests it should be avoided due the acidic pH, a result of the carbonic acid content found in carbonated soft drinks. Oral Care Plans (Table 5) can be divided into three categories based on past and current treatments for oral complications. <i>Basic Oral Care Plan</i> A basic regimen of oral care, intended for all cancer patients without oral complications, is considered a prevention strategy and is essential to minimize the risk of developing future complications. This plan should be initiated before treatment begins and continued until the risk of side effects or oral complications is over. These practices are for the patient with Grade 0 to 1 mucositis using RTOG or WHO mucositis rating scales. <i>Intensified Oral Care Plan</i> Intensified oral care practices are intended for the patients who have been graded on the RTOG or WHO mucositis rating scales as 2 or greater. These practices build on those of basic oral care practices	

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		Dietary management • NPO as needed • IV hydration, enteral or parenteral nutrition (TPN) as prescribed until patient stable and symptoms begin to resolve	and may be considered as treatment interventions. Voir table 5 et 6 Prevention of Oral Mucositis: Non-pharmacological Interventions For patients at high risk of developing oral mucositis prevention is the most effective strategy. There is some evidence for the use of ice chips for the prevention of oral mucositis. Ice Chips (for patients receiving bolus 5-fluorouracil (5-FU)) • Ice chips were found to be beneficial in the prevention of all outcome categories of mucositis. • Patients receiving bolus 5-FU chemotherapy are instructed to swish ice chips in their mouth, if possible, starting 5 minutes prior to the bolus and for 30 minutes duration. • Cold packs or frozen ice bags may be used alternatively to relieve 5-FU related side effects. • These instructions are not practical for continuous infusions of 5-FU. • Do NOT use ice chips for regimens containing both 5-FU and oxaliplatin as cold-induced dysesthesia from oxaliplatin is a common and preventable toxicity of this agent.	

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
			Ice Chips (for patients receiving melphalan): - Patients receiving high-dose melphalan as part of a conditioning regimen for stem cell transplant should be treated with ice chips to prevent oral mucositis. Intensity Modulated Radiation Therapy (IMRT): - IMRT is currently the treatment of choice for head and neck patients. IMRT allows for the delivery of high-doses of radiation while sparing healthy tissues in close proximity. - If IMRT is not available, three-dimensional radiation treatment to the oral cavity may be used. Low Level Laser Therapy (LLLT): - There is some evidence that LLLT may reduce the incidence of oral mucositis and its associated pain in patients receiving high-dose chemotherapy or chemo-radiotherapy before Hematopoietic Stem Cell Transplant (HSCT). - Laser therapy requires specialized equipment and training, which is not widely available. Multivitamin: - To prevent nutritional deficiencies a multivitamin may be considered for inclusion. Management of Oral Mucositis: Non-Pharmacological Interventions	

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
			Nutritional Care <i>General Nutritional Recommendations for Patients Experiencing Symptoms</i> • Individual tolerance may vary from patient to patient. • Consult a dietitian for nutritional advice on managing individual oral care symptoms. <i>Mild and Moderate Oral Mucositis</i> • Choose texture as tolerated and modify as required. • May need to start with soft, moist, smooth foods; if not tolerated try extra soft/pureed foods. • Choose foods high in calories and protein, 6-8 small meals/snacks daily. • Cook solid foods until tender, use moist sauces, choose soft, bland foods. • Avoid foods that irritate the mouth or throat. • Avoid eating foods which are abrasive, rough, tart, salty, spicy, acidic, very hot or very cold. • Oral commercial nutritional supplements may be necessary. • There is insufficient evidence to support the use of vitamin B12, beta-carotene calcium, multivitamin, chamomile, glutamine, or curcumin in the treatment of oral mucositis. • If oral intake is inadequate for a prolonged period consider using a regular strength multivitamin. <i>Severe Oral Mucositis</i> • Choose texture, as tolerated, and modify as required.	

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
			• May need to start with extra soft/pureed diet. • If only liquids are tolerated, choose high calorie, high protein fluids every 2 hours. • Oral commercial nutrition supplements are recommended. • A liquid regular strength multivitamin may be recommended. • Severe oral mucositis during cancer treatment (grade 3 or 4) may be managed with an appropriately placed feeding tube or total parenteral nutrition (TPN) depending on the patient's goals of care. • The type of tube (i.e., gastrostomy or jejunostomy) and the method of placement (i.e., surgical or radiological) should be determined by the degree and extent of mucositis and the potential worsening of symptom due to planned cancer treatment. • Consult dietitian if possible.	

9. Informations à transmettre à la personne atteinte, son proche aidant ou l'équipe de soins

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
Ø	Ø	<u>GRADE 1</u> Patient Education and Follow-Up • Prior to the commencement of cancer therapy, review oral care and hygiene recommendations with patient/family • Demonstrate/assess understanding of how to perform daily oral assessment at home • Provide verbal and written information on maintaining oral hygiene at onset of treatment • Provide contact information and reinforce with patient/family when to seek immediate medical attention if the following emergent conditions develop; - Temperature greater than or equal to 38° C, presence of white patches, redness, foul odour – possible infection - Difficulty breathing– respiratory distress - Bleeding lasting longer than 2 minutes– possible thrombocytopenia - Unable to eat or drink fluids for more than 24 hours– risk for dehydration - Difficulty swallowing– reflective of severity of symptoms - Uncontrolled pain- reflective of deteriorating patient status and severity of symptoms • Instruct patient/family to call back if mucositis worsening, not improving or other complications develop	Ø	Votre médecin vous a prescrit des médicaments contre le cancer. De l'inconfort ou des lésions dans la bouche (ulcères) sont un effet indésirable fréquent de ces médicaments. Vous pouvez les prévenir ou les soulager en prenant soin de votre bouche de la façon suivante : • Si possible avant de débiter votre traitement, prévoyez une visite chez votre dentiste (nettoyage, retrait de la plaque dentaire, réparation des caries, etc.). • Buvez beaucoup d'eau ou de liquide (10 à 12 verres de 230 ml ou 8 onces par jour) à moins d'avis contraire de votre médecin. • Évitez les cure-dents. • Évitez de mordre l'intérieur de vos joues, de porter des bijoux de bouche (piercing), de grincer ou de serrer des dents. • Brossage des dents : - Brossez-vous les dents régulièrement avec une brosse à dents à poils souples (2 à 4 fois par jour). - Rincez votre brosse à dents sous l'eau du robinet pendant environ 30 secondes avant le brossage afin d'attendrir les poils. Rincez à nouveau après le brossage et laissez sécher à l'air. - Évitez les pâtes dentaires avec une saveur trop prononcée ou blanchissante. - Utilisez un dentifrice fluoré. - Un dentifrice pour dents sensibles peut également

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
				être utilisé. - Changez régulièrement votre brosse à dents (idéalement tous les mois). - Évitez les brosses à dents électriques (pourrait vous blesser si mal utilisée). • Utilisation de la soie dentaire : - Si vous passez déjà la soie dentaire régulièrement, continuez de le faire 1 fois par jour avant le brossage. - Si vous n'utilisez pas la soie dentaire régulièrement, évitez de débiter pendant vos traitements, à moins d'avis contraire de votre dentiste. - Cessez l'utilisation de la soie dentaire si douleur ou saignement des gencives. • Prothèses et autres appareils dentaires : - Assurez-vous que vos prothèses sont bien ajustées et ne vous causent pas de douleur ou de blessures. - Retirez vos prothèses avant de vous rincer la bouche. - Brossez-les après chaque repas et au coucher. - Rincez-les avec le rinçage-bouche ci-dessous avant de les porter (évitez les solutions de trempage commerciales puisqu'elles contiennent souvent du peroxyde et/ou de l'alcool). - Évitez de les porter en continu (24 h par jour). Retirez les prothèses pendant la nuit. - Prenez rendez-vous annuellement avec votre professionnel de soins dentaires pour la vérification de votre appareil dentaire.

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
				• Rince-bouche : - Évitez les rince-bouches contenant de l'alcool. - Rincez-vous la bouche le plus souvent possible avec : voir table - Si vous préparez votre rince-bouche vous-même, jetez-le chaque jour pour éviter la croissance des bactéries. - Évitez de manger ou de boire dans les 30 minutes suivant l'utilisation du rince-bouche. • Alimentation : - Évitez : alcool, tabac, caféine, aliments acides (p.ex. : tomate, citron, pamplemousse), aliments épicés, aliments durs ou coriaces, aliments très sucrés (p. ex. : boissons gazeuses ou énergétiques) - Essayez : produits laitiers (p.ex. : yogourt, crème glacée, fromage cottage), purées pour bébé, pommes de terre en purée, céréales cuites (p.ex. : avoine, orge), œufs, concombres frais en tranches, attendrir vos aliments avec du beurre (ou de la margarine) ou des sauces • Soins des lèvres : - Utilisez un baume à lèvres à base d'eau, sans saveur, sans couleur sur vos lèvres (éviter les produits à base de gelée de pétrole, à moins d'avis contraire de votre équipe soignante). - Appliquez-le aussi souvent que nécessaire (après le brossage des

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
				dents, le rinçage de la bouche et au coucher) et au besoin lorsque vos lèvres sont sèches. - Utiliser un baume à lèvres avec facteur de protection solaire lors de vos activités à l'extérieur. • Bouche sèche : - Sucrer des glaçons, des popsicles (à moins d'avis contraire de votre équipe soignante) ou des bonbons sans sucre. - Buvez beaucoup d'eau. - Mâchez de la gomme sans sucre (p. ex. : xylitol). Si vous avez des ulcères (aphtes) ou des plaques blanchâtres dans la bouche ou encore si vous avez de la douleur, ou de la difficulté à vous alimenter, consultez immédiatement un membre de l'équipe soignante qui pourra vous conseiller des soins appropriés.

10. Suivi – Appréciation de l'efficacité et de l'innocuité du traitement et de l'absence de complication

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
Ø	Ø	<u>GRADE 1</u> • Instruct patient/family to call back if mucositis worsening, not improving or other complications develop <u>GRADE 2 – GRADE 3 OR</u> <u>Not able to tolerate adequate daily fluid intake and/or presence of white patches in oral mucosa URGENT: requires medical attention within 24 hours</u>	Ø	Ø

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
		Management of Oral Complications Oral pain: • For pain from moderate to severe oral mucositis, systemic analgesics are indicated • A topical anesthetic or analgesic may be prescribed in addition to systemic analgesia Local infection: • Review recent lab reports, culture any suspect areas, check temperature • Review prescribed medications with patient Minor bleeding with trauma (stops after 2 minutes): • Assess complete blood count, particularly platelet function, and hemoglobin • Rinse mouth with ice water and apply pressure to control bleeding- suggest using frozen tea bag/wet gauze Dry mouth (xerostomia): • Use sugarless gum or candy to help stimulate saliva • Keep bottle of water present at all times, encourage frequent sips <u>GRADE 4 OR Presence of the following: Temperature greater than or equal to 38°C, uncontrolled pain, blisters or cracks in oral mucosa</u> <u>EMERGENT: Requires IMMEDIATE medical attention</u>		

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
		Management of Oral Complications Oral pain: • Systemic analgesics at regular intervals around the clock • For severe pain, patient controlled analgesia (PCA) with morphine or other strong opioid may be indicated Infection: • Culture any suspect areas • Review lab values including complete blood count, electrolyte profile, blood cultures • Administer topical and/or IV anti-infective medications as prescribed (e.g. antibiotics, antifungals, antiviral agents) • Assess temperature every 4 hours and as clinically indicated Persistent or spontaneous bleeding: • Assess complete blood count, particularly platelets and hemoglobin • Rinse mouth with ice water and apply pressure (e.g. with frozen tea bag or wet gauze) to control bleeding. Do not remove any clots • If persistent bleeding, topical thrombin, aminocaproic acid, and/or platelet transfusion may be ordered		

11. Suivi – Modalités de suivi

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
Ø	Ø	Ø	Ø	Ø

12. Situations qui exigent une investigation supplémentaire ou une réévaluation

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
When to refer to specialists Oncology: For grade 3 or 4 mucositis alert the oncologist; urgent hospital admission may be needed for hydration, antibacterial, antiviral, antifungal and other therapies. Palliative care: For additional pain management suggestions or when mucositis is associated with other distress and suffering e.g. physical, social, psychological symptoms or functional impairment.	Ø	GRADE 1 • Provide contact information and reinforce with patient/family when to seek immediate medical attention if the following emergent conditions develop; - Temperature greater than or equal to 38° C, presence of white patches, redness, foul odour – possible infection - Difficulty breathing– respiratory distress - Bleeding lasting longer than 2 minutes– possible thrombocytopenia - Unable to eat or drink fluids for more than 24 hours– risk for dehydration - Difficulty swallowing– reflective of severity of symptoms - Uncontrolled pain- reflective of deteriorating patient status and severity of symptoms GRADE 2 – GRADE 3 OR <u>Not able to tolerate adequate daily fluid intake and/or presence of white patches in oral mucosa URGENT: requires medical attention within 24 hours</u> Patient Care and Assessment Collaborate with physician if patient: • On active chemotherapy treatment and concern re:	Analgesics: • When continuous pain is present (example moderate to severe oral mucositis) an oral analgesic prescribed regularly may be considered to allow for more thorough tooth brushing. Consult specialists in pain and palliative care as needed. Refer to the Pain Guide-to-Practice for more information regarding opioid prescribing.	Si vous avez des ulcères (aphtes) ou des plaques blanchâtres dans la bouche ou encore si vous avez de la douleur, ou de la difficulté à vous alimenter, consultez immédiatement un membre de l'équipe soignante qui pourra vous conseiller des soins appropriés.

AHS 2019	ROHPPA 2017	BC Cancer 2019	Cancer Care Ontario 2012	GEOQ 2017
		treatment delay or reduction required. See <u>Chemotherapy Protocols for specific instructions</u> - Requires new or change in prescription - Requires further evaluation and assessment in an ambulatory setting <u>GRADE 4 OR Presence of the following: Temperature greater than or equal to 38°C, uncontrolled pain, blisters or cracks in oral mucosa</u> <u>EMERGENT: Requires IMMEDIATE medical attention</u> Patient Assessment and Care - Admission to hospital, notify physician of assessment, facilitate arrangements as necessary - If on active treatment, patient may require chemotherapy treatment dosage reduction, delay or discontinuation. See <u>Chemotherapy Protocols for specific instructions</u> - Prophylactic intubation may be required if patient at risk for aspiration or is in severe respiratory distress - Nursing Support: - Frequent oral assessments by nurse – three times daily and as clinically indicated - Monitor vital signs as clinically indicated - Accurate monitoring of intake and output, include daily weight - Pain and symptom assessment and management as appropriate		

Tableau E-5 Tables extraites du Cancer Care Ontario 2012

Table 5. Oral Care Plans (Adapted from CCNS (1), BCCA (3,4) and Su et al (14)).

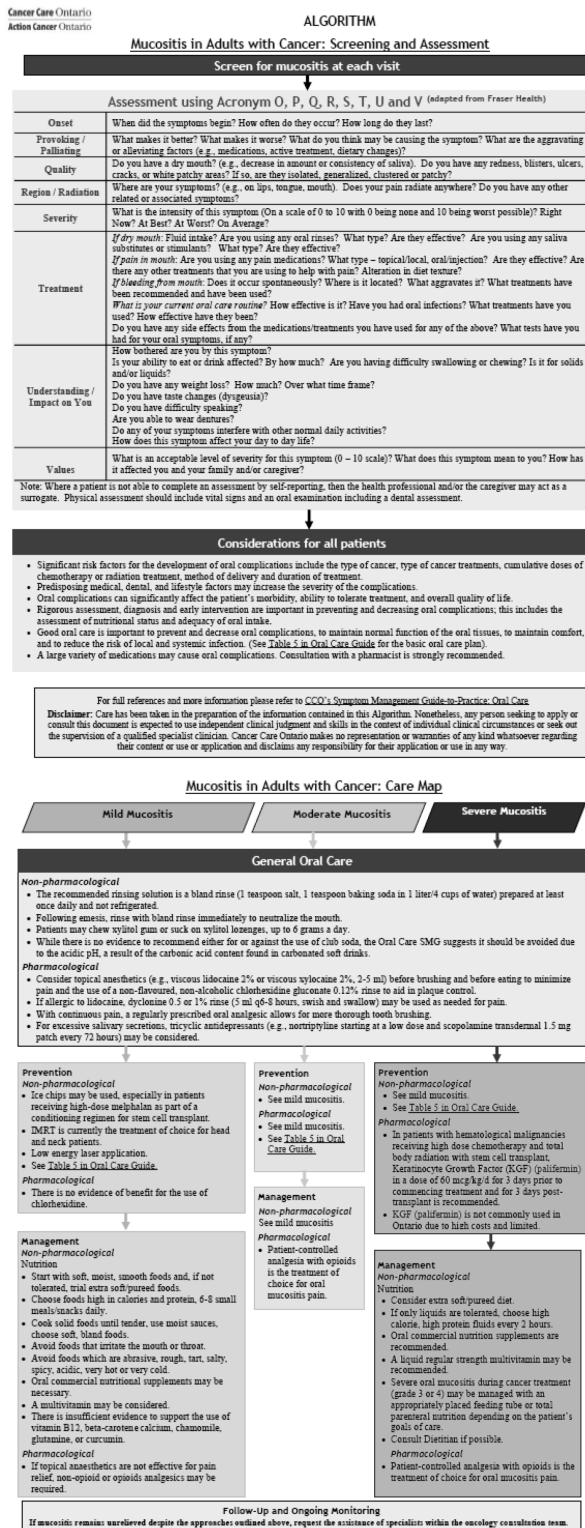
Intervention	Basic Oral Care Plan	Intensified Oral Care Plan
Flossing	- Floss at least once daily. - Waxed floss may be easier to use and minimize trauma to the gingivae. - If flossing causes bleeding of the gums, which does not stop after 2 minutes, it should be discontinued. - Flossing may be restarted when the platelet count is $> 20 \times 10^9$ cells/L or as instructed by cancer care team. - Patients who have not flossed routinely before cancer treatment should not begin flossing at this time. - Patients with mouth cancers may not be able to floss.	- Continue until discomfort becomes too great. - Discontinue flossing if gums bleed for longer than 2 minutes. - Advise patient to try to begin flossing again when platelet count rises $> 20 \times 10^9$ cells/L.
Brushing	- Use a small, ultra soft-headed, rounded-end, bristle toothbrush (an ultrasonic toothbrush such as sonicare, may be acceptable). - Use a prescription strength fluoride toothpaste (e.g., preident, fluridex, XPur). Spit out the foam but do not rinse mouth. - Use remineralizing pastes (e.g., Mipaste, Oral Science) and chewing gum containing recalcit to replenish calcium and phosphate ions. - Brush within 30 minutes after eating and before bed. Ensure the gingival portion of the tooth and periodontal sulcus are included. - Rinse toothbrush in hot water to soften the brush before using. - Brush tongue gently from back to front. - Rinse brush after use in hot water and allow to air dry. - Change toothbrush when bristles are not standing up straight. - If gingival tissue bleeds for more than 2 minutes, brushing may be stopped and teeth cleaned with clean, moist gauze or foam swab (personal preference may guide practice). Once platelets are $> 20 \times 10^9$ cells/L then brushing may be resumed. <u>Patients with Head & Neck Cancers</u> - Brushing may not be appropriate in the area of tumor involvement. - Patients should be assessed for the use of daily Fluoride tray. - Consult with a dentist. <u>Dentures</u> - Remove dentures, plates and prostheses before brushing. - Brush and rinse dentures after meals and at bedtime. - Remove from mouth for long periods (at least 8 hours per 24 hours) and soak in rinsing solution.	- Use ultra soft toothbrush or soften brush bristles under hot water. - Encourage patient to continue brushing through treatment phase even when it causes discomfort. - If unable to tolerate brushing, seek assistance from nursing or dental staff. - To remove debris and mucus consider using moist gauze or a foam swab soaked in rinsing solution. - Discontinue use of toothpaste if it is too astringent and dip toothbrush in bland rinse (1 teaspoon salt, 1 teaspoon baking soda in 4 cups of water). - If bleeding occurs, encourage gentler brushing. - If there has been an oral infection, use a new toothbrush after infection has resolved. <u>Dentures</u> - Keep dentures out of mouth as much as possible, especially if painful.

Rinsing	- Rinsing the oral cavity vigorously helps maintain the moisture in the mouth, removes the remaining debris and toothpaste, and reduces the accumulation of plaque and infection. - Patients should rinse, swish and spit with a bland rinse (1 teaspoon salt, 1 teaspoon baking soda in 4 cups of water) several times after each brushing or flossing and as needed. - Club soda should be avoided, due to the presence of carbonic acids. - Commercial mouthwashes with hydroalcoholic base or astringent properties are not recommended for patients with oral complications. - Debriding should only be done if absolutely necessary, if tissue is loose causing gagging or choking. <u>Dentures</u> - After removing dentures rinse mouth thoroughly with rinse solution. - Brush and rinse dentures after meals and at bedtime. - Rinse with rinsing solution before placing in mouth. - Remove from mouth for long periods (at least 8 hours per 24 hours) and soak in rinsing solution.	- Perform in place of brushing if patient is absolutely unable to brush. - Seek dental care where possible for removing plaque. - In addition to rinsing after meals, encourage rinsing every 1-2 hours while awake and every 4 hours through the night if awake (to minimize complications of decreased saliva). - If unable to clean using toothette, gauze or swishing (or tilting head), syringe rinsing solution into different areas of mouth if platelet level is not too low.
Moisturizing the Oral Cavity	- Moisturize the mouth with water or artificial saliva products (e.g., Moi-Str Spray, Biotene products) or other water soluble lubricants for use inside the mouth. Mouth kote not recommended as pH is acidic, don't need to state that but it should be removed. - Avoid glycerin or lemon-glycerin swabs as they dry the mouth and do not moisturize. - Apply lubricant after each cleaning, at bedtime, and as needed. - Water-based lubricant needs to be applied more frequently. - Frequent rinsing as needed with basic mouth rinse.	Continue with basic mouth care plan with increased frequency and intensity.
Lip Care	- To keep lips moist and to avoid chapping and cracking use water soluble lubricants, lanolin (wax-based), or oil based (mineral oil, coco butter) lubricants. - Water soluble lubricants should be used inside and outside the mouth, and may also be used with oxygen, e.g., products compounded with Glaxal base or Derma base (K-Y Jelly, Dermabase). - Apply lubricant after each cleaning, at bedtime, and as needed. - Water-based lubricants need to be applied more frequently. - Avoid oil based lubricants on the inside of the mouth. - Petroleum based products should be avoided. - Patients should be encouraged not to touch any lip lesions.	Continue with basic mouth care plan with increased frequency and intensity.

Table 6. Agents Which Have Insufficient Evidence for Prevention or Treatment of Mucositis

Intervention	Insufficient Evidence Prevention	Insufficient Evidence Treatment
Aloe Vera	☑ (7)	
Allopurinol, Vitamin E	☑ (7)	☑ (1,8).
Amifostine (Not available for treatment in Canada).	☑ (7)	☑ (2)
Antimicrobial Lozenges	☑ (2,7)	
Anti-inflammatory Rinses	☑ (2,7)	☑ (1)
Benzydamine	☑ (7)	☑ (8)
Filgrastim	☑ (1,7)	
Flurbiprofen	☑ (2)	
Glutamine (Systemic)	☑ (7)	☑ (2)
Glutamine (topical or oral suspension)	☑ (7)	
Granulocyte-macrophage-colony stimulating factor (GM-CSF) Mouthwash	☑ (6,7)	☑ (1,2,8)
Histamine Gel	☑ (7)	
Honey	☑ (7)	
Hydrolytic enzymes	☑ (7)	
Multiagent ("Magic" or "Miracle") Rinses		☑ (2,8)
N-acetylcysteine (oral rinse)	☑ (1)	
Sucralfate	☑ (2,7)	☑ (8)
Systemic Anti-inflammatory	☑ (7)	
Pentoxifylline	☑ (7)	
Pilocarpine	☑ (7)	
Povidone-iodine (oral rinse)	☑ (2,7)	
Zinc Sulphate		☑ (7)

Figure E-2 Algorithme de décision du Cancer Care Ontario



Source : Cancer Care Ontario (CCO). Mucositis in adults with cancer: Screening and assessment – Algorithm. Toronto, ON : CCO; 2012. Disponible à : [http://www.centralhpcnetwork.ca/hpc/HPC_docs/Oral%20Care%20-%20Mucositis%20\(Algorithm\).pdf](http://www.centralhpcnetwork.ca/hpc/HPC_docs/Oral%20Care%20-%20Mucositis%20(Algorithm).pdf).

Résultats des extractions des données des monographies

Tableau E-7 Extractions des données des monographies

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
SOURCE ET MISE À JOUR				
Monographie de l'APhC Révision 23 mai 2017 https://www.myrxtx.ca/sea_rch	Monographie de l'APhC Révision 1 août 2018 https://www.myrxtx.ca/sea_rch	Monographie de Pharmascience Inc. Révision 6 avril 2016 https://pdf.hres.ca/dpd_p_m/00034373.PDF	Monographie de l'APhC Révision 1 novembre 2019 https://www.myrxtx.ca/sea_rch	Monographie de Sandoz Révision 5 octobre 2020 Forme injectable https://www.drugs.com/monograph/diphenhydramine.html
INDICATIONS				
Magnesium hydroxide is used for the short-term treatment of constipation, for the relief of symptoms of heartburn and acid indigestion and as a dietary supplement. Formulations of magnesium hydroxide in combination with aluminum hydroxide are commonly used for GI-related nausea	This monograph addresses the systemic use of corticosteroids by the oral, IV and IM routes. It also includes local (in situ) use of parenteral corticosteroid preparations (e.g., intra-articular, intralesional and soft tissue injections). Corticosteroids relieve inflammation but do not affect disease progression. For many indications, systemic corticosteroids are reserved for acute or severe exacerbations unresponsive to conventional therapy. Local injection of appropriate formulations directly into the affected tissues may be the optimal route of administration in some inflammatory disorders where local action is required. Not all routes of administration are appropriate or indicated for all conditions listed. Health Canada–Approved Indications Specific Health Canada–approved indications vary among the corticosteroids available. Current clinical use may differ from indications listed in the official product monographs. Cortisone, betamethasone (IM), dexamethasone, dexamethasone sodium	Adults (≥18 years of age): pms-lidocaine viscous 2% (lidocaine hydrochloride oral topical solution, usp) is indicated to provide relief of pain and discomfort in connection with: - irritated or inflamed mucous membranes of the mouth and pharynx, e.g. lesions following tonsillectomy; - introduction of instruments and catheters into the respiratory and digestive tracts, e.g. bronchoscopy, esophagoscopy; - painful diseases of the upper gastrointestinal tract e.g. esophagitis. Geriatrics (>65 years of age): Elderly patients should be given reduced doses commensurate with their age and physical condition (see dosage and administration-special populations). Pediatrics (2 to <18 years of age): Children should be given reduced doses commensurate with their age, weight and, physical condition (see dosage and administration-special populations). Lidocaine should be used with caution in children	Health Canada–Approved Indications - Treatment of infections of the mouth and GI tract caused by <i>C. albicans</i>, including oropharyngeal candidiasis in patients with HIV infection. - Prevention and treatment of lower intestinal and anal infections caused by <i>C. albicans</i>. - Treatment of uncomplicated vulvovaginal candidiasis; however, the Canadian Guidelines on Sexually Transmitted Infections recommend use of topical or oral azole antifungals as first-line treatment in symptomatic uncomplicated vulvovaginal candidiasis [Canadian guidelines on sexually transmitted infections. Evergreen ed. Ottawa: PHAC]. - Treatment of cutaneous or mucocutaneous infections caused by <i>C. albicans</i> such as candidal diaper dermatitis, angular cheilitis, intertriginous candidiasis and paronychia.	Acute Allergic Reactions Amelioration of allergic reactions to blood or plasma. Adjunct to epinephrine and other standard measures for management of anaphylaxis after acute symptoms have been controlled. Used IV or IM for management of other uncomplicated allergic conditions of the immediate type when oral therapy is impossible or contraindicated. Allergic Rhinitis Self-medication for temporary relief of rhinorrhea, sneezing, lacrimation, itching eyes, oronasopharyngeal irritation or itching, or cough associated with allergic rhinitis (e.g., hay fever) or other upper respiratory allergies. Used in fixed combination with other agents (e.g., acetaminophen, phenylephrine) for relief of rhinorrhea, sneezing, lacrimation, itching eyes, oronasopharyngeal itching, and/or other symptoms (e.g., headache, nasal/sinus congestion) associated with seasonal or perennial allergic rhinitis or other upper respiratory allergies. Use fixed-combination preparations only when

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
	phosphate (IM), hydrocortisone, hydrocortisone sodium succinate, methylprednisolone, methylprednisolone acetate (IM), methylprednisolone sodium succinate, prednisolone sodium phosphate, prednisone and triamcinolone acetate (IM): • Adjunctive therapy in the management of severe hemorrhagic, surgical or traumatic shock • Adjunctive therapy in the management of fulminating or disseminated pericardial, pulmonary tuberculosis and tuberculous meningitis • Control of severe or incapacitating allergic conditions (e.g., drug sensitivity reactions and angioedema) • In combination with antiemetics for the management of nausea and vomiting associated with emetogenic chemotherapy • Management of endocrine disorders (e.g., adrenocortical insufficiency, congenital adrenal hyperplasia and hypercalcemia associated with cancer) • Management of acute episodes and exacerbations of various rheumatic and collagen diseases (e.g., rheumatoid arthritis and gout) • Management of edema associated with brain tumours • Management of polymyalgia rheumatica and giant cell arteritis • Management of proteinuria in the nephrotic syndrome without uremia	younger than two years of age as there are insufficient data to support the safety and efficacy of this product in this patient population at this time. Use in this patient population should be limited to those situations where safer alternatives are not available or have been tried but failed (see WARNINGS AND PRECAUTIONS-Special Populations). Do not use to treat teething pain in infants and children.		symptoms amenable to each ingredient are present concurrently. Common Cold Self-medication for temporary relief of symptoms associated with the common cold (e.g., rhinorrhea, sneezing, cough). Used in fixed combination with other agents (e.g., acetaminophen, phenylephrine) for symptomatic relief of rhinorrhea, sneezing, and/or other symptoms associated with the common cold (e.g., headache, minor aches and pains, sore throat, cough, nasal congestion). Insomnia Self-medication for short-term (i.e., ≤2 weeks) management of occasional sleeplessness, particularly in individuals who have difficulty falling asleep. Used in fixed combination with other agents (e.g., acetaminophen) for short-term management of occasional sleeplessness. Development of tolerance reported with repeated use. Dermatologic Disorders Systemic antihistamines may be more effective than topical, especially if pruritus is generalized, and less likely to cause sensitivity reactions than when applied topically for pruritus associated with various dermatological conditions. Motion Sickness Prevention and treatment of nausea, vomiting, and/or vertigo associated with motion sickness. Parkinsonian Syndrome May be useful as alternative therapy in the management of tremor early in the course of parkinsonian syndrome.

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
	- Management of various severe neurologic, dermatological, GI, ophthalmic and respiratory diseases with allergic or inflammatory component (e.g., multiple sclerosis, bullous pemphigoid, ulcerative colitis, and bronchial asthma) - Palliative management of neoplastic diseases in adults as part of oncology protocols Betamethasone, dexamthasone sodium phosphate, methylprednisolone acetate, triamcinolone acetate and triamcinolone hexacetonide—intra-articular, intralesional and peritendinous injections: - Management of acute severe gouty arthritis - Short-term management of acutely inflamed joints in osteoarthritis and rheumatoid arthritis - Management of localized hypertrophic inflammatory lesions (e.g., keloids, chalazia and discoid lupus erythematosus) - Management of specific sports injuries (e.g., supraspinatus tendinosis with persistent impingement symptoms or bursitis)			Also may be useful in the management of drug-induced extrapyramidal reactions. Used IV for management of parkinsonian syndrome when oral therapy is impossible or contraindicated. Used specifically in geriatric patients who are unable to tolerate more potent agents; for mild cases of parkinsonism in younger patients; and in combination with centrally acting anticholinergic agents in other cases of parkinsonism.
CONTRE-INDICATIONS				
- Patients who are hypersensitive to any ingredient in the formulation or component of the container. - Patients with heart block. - All laxatives are contraindicated in patients with acute abdominal pain, nausea, vomiting or other symptoms of appendicitis or undiagnosed	- Patients who are hypersensitive to corticosteroids or to any ingredient in the formulation or component of the container - Patients with systemic fungal infection	- Patients with a known history of hypersensitivity to local anesthetics of the amide type or to other components of the solution (see DOSAGE FORMS, COMPOSITION AND PACKAGING). - Patients with a known	Patients who are hypersensitive to nystatin or to any ingredient in the formulation	Contraindications Use contraindicated in neonates and premature infants. (See Pediatric Use under Cautions.) Women who are breast-feeding. (See Lactation under Cautions.) Injection should not be used as a local anesthetic. (See Local Necrosis under Cautions.) Concomitant use with other preparations containing diphenhydramine,

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
abdominal pain. Patients with serious renal impairment.		hypersensitivity to methylparaben and/or propylparaben (preservatives used in pms-LIDOCAINE VISCOUS 2%), or to their metabolite para amino benzoic acid (PABA). Formulations of lidocaine containing parabens should also be avoided in patients with a history of allergic reactions to ester local anesthetics, which are metabolized to PABA.		including oral and topical preparations. Known hypersensitivity to diphenhydramine, other antihistamines with similar chemical structure, or any ingredient in the formulation.

PRÉCAUTIONS

Cardiovascular Hypermagnesemia can cause heart block. Patients with heart block should not consume magnesium supplements. Endocrine and Metabolism Repeated administration of osmotic saline laxatives may result in dehydration if not administered with sufficient fluids. Long-term use or overdosage of osmotic saline laxatives can result in serious and potentially life-threatening electrolyte disturbances. Gastrointestinal All laxatives are contraindicated in patients with acute abdominal pain, nausea, vomiting or other symptoms of appendicitis or undiagnosed abdominal pain. It is recommended that patients with ileostomies or colostomies avoid use of laxatives. Magnesium-containing antacids or supplements commonly cause a laxative effect. Repeated doses may cause diarrhea, which	General Because risks associated with corticosteroid use are dependent on the dosage regimen, a decision must be made based on the risk/benefit for every patient with respect to dose and duration of treatment and whether daily or intermittent therapy should be used. Carcinogenesis and Mutagenesis Cases of Kaposi sarcoma have been reported with prolonged treatment with corticosteroids. Cardiovascular Because corticosteroids use has been associated with fluid retention, electrolyte imbalance and hypertension, use with caution in patients with heart failure and/or hypertension. Dermatologic To minimize the likelihood and severity of dermal atrophy, corticosteroids should not be injected subcutaneously. Injections into the deltoid area or repeat injections	Life-threatening and fatal events in infants and young children Postmarketing cases of seizures, cardiopulmonary arrest, and death in patients under the age of 3 years have been reported with use of lidocaine hydrochloride solution due to accidental ingestion, or accidental overdose when it was not administered in strict adherence to the dosing and administration recommendations. pms-lidocaine viscous 2% should not be administered to infants and children for teething pain. Pms-lidocaine viscous 2% should be used with caution in children under the age of 2 as there is insufficient data to support the safety and efficacy of this product in this patient population at this time. Use in this patient population should be limited to those situations where safer alternatives are not available or have been tried but failed (see warnings and	General Topical nystatin cream and ointment should not be used in the treatment of systemic, oral, ophthalmic or vaginal infections. oral suspension should not be used in the treatment of systemic fungal infections. Special Populations <u>Pregnant women:</u> Nystatin is poorly absorbed from the GI tract, intact skin and mucous membranes. available data suggest there is no association between exposure during pregnancy and congenital defects. Nystatin may therefore be considered for use during pregnancy. <u>Nursing women:</u> Due to poor absorption, levels of nystatin in breast milk are negligible. Nystatin may therefore be considered for use when breastfeeding.	Concomitant Diseases Patients with glaucoma, respiratory conditions (e.g., emphysema, chronic bronchitis), or difficulty urinating due to prostatic hypertrophy should consult a clinician before initiating therapy with diphenhydramine. Use with caution in patients with increased IOP, angle-closure glaucoma, stenosing peptic ulcer, pyloroduodenal obstruction, bladder-neck obstruction, symptomatic prostatic hypertrophy, active or a history of lower respiratory disease (e.g., bronchial asthma), hyperthyroidism, or cardiovascular disease (e.g., hypertension). CNS Effects Risk of marked drowsiness. Among first generation antihistamines, ethanolamines (e.g., diphenhydramine) considered the most sedating and alkylamines (e.g., brompheniramine, chlorpheniramine) considered the least sedating.
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Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
could result in fluid and electrolyte imbalance. Neurologic Use with extreme caution in patients with myasthenia gravis or other neuromuscular diseases, since magnesium has a significant inhibitory effect on acetylcholine release. Renal Use cautiously in individuals with reduced kidney function due to an increased risk of hypermagnesemia. Magnesium serum levels should be monitored in renally impaired patients who are receiving magnesium. Special Populations <u>Pregnant Women:</u> Magnesium crosses the placenta. Serum levels in the fetus correlate with those in the mother. Intermittent use of magnesium laxatives and antacids (with the exclusion of products that contain sodium bicarbonate or magnesium trisilicate) is considered safe in pregnancy. Magnesium trisilicate, which has been associated with fetal nephrolithiasis, hypotonia, respiratory distress and cardiovascular impairment, may be found in some commercial products marketed for gastrointestinal symptoms. <u>Nursing Women:</u> Use of oral magnesium salts is considered compatible with breastfeeding. <u>Geriatrics</u> : As kidney function declines with age, older individuals may be at increased risk of developing hypermagnesemia following ingestion of oral magnesium salts.	into any one site should also be avoided. Endocrine and Metabolism Following prolonged therapy with high doses of corticosteroids, abrupt discontinuation may result in a withdrawal syndrome and secondary adrenocortical insufficiency. Secondary adrenocortical insufficiency may be minimized by gradual reduction of glucocorticoid dose. Symptoms of adrenal insufficiency resulting from rapid withdrawal include nausea, fatigue, anorexia, dyspnea, hypotension, hypoglycemia, myalgia, fever, malaise, arthralgia, dizziness, skin desquamation and fainting. This type of relative insufficiency may persist for up to a year after discontinuation of therapy. In patients subjected to unusual stress during this period (e.g., surgery), reinstitute corticosteroid therapy beforehand, and continue during and after the stressful situation. If the patient is already receiving corticosteroids, a higher dosage may be required. Since mineralocorticoid secretion may be impaired, salt and/or a mineralocorticoid may be needed. There is an enhanced effect of corticosteroids on patients with hypothyroidism. Gastrointestinal Corticosteroid therapy may mask the symptoms of peptic ulcer. Perforation or hemorrhage may occur without significant pain. The combination of glucocorticoids with NSAIDs or ASA significantly increases the risk of adverse GI events. Consider gastroprotection	Precautions, special populations). General EXCESSIVE DOSAGE, OR SHORT INTERVALS BETWEEN DOSES, CAN RESULT IN HIGH PLASMA LEVELS OF LIDOCAINE OR ITS METABOLITES AND SERIOUS ADVERSE EFFECTS. PATIENTS SHOULD BE INSTRUCTED TO STRICTLY ADHERE TO THE RECOMMENDED DOSAGE. This is especially important in children where doses vary with weight. The management of serious adverse reactions may require the use of resuscitative equipment, oxygen and other resuscitative drugs (see overdose). Absorption from the wound surfaces and mucous membranes is variable but is especially high from the bronchial tree. Such applications may therefore result in rapidly rising or excessive plasma concentrations, with an increased risk for toxic symptoms, such as convulsions. The lowest dosage that results in effective anesthesia should be used to avoid high plasma levels and serious adverse effects. Tolerance to elevated blood levels varies with the status of the patient. pms-LIDOCAINE VISCOUS 2% IS FOR ORAL TOPICAL USE ONLY AND MUST NOT BE USED FOR INJECTION. pms-LIDOCAINE VISCOUS 2% should be used with caution in patients with sepsis and/or traumatized mucosa at the area of application, since under		Possible excitability (especially in children). Caution when driving a motor vehicle, operating machinery, or engaging in other potentially hazardous tasks. (See CNS Depressants under Interactions.) Diphenhydramine Toxicity Risk of toxicity. (See Pediatric Use under Cautions.) Do not use more often than directed for any condition; do not concomitantly use more than one preparation containing diphenhydramine (e.g., avoid simultaneous use of oral and topical preparations). Local Necrosis Risk of local necrosis with subcutaneous or intradermal administration. Do not use diphenhydramine injection as a local anesthetic. Sensitivity Reactions Sulfite Sensitivity Some formulations may contain sulfites, which may cause allergic-type reactions (including anaphylaxis and life-threatening or less severe asthmatic episodes) in certain susceptible individuals. General Precautions Duration of Therapy When used for insomnia, avoid using for self-medication for longer than 7–10 nights, and consult a clinician if insomnia persists continuously for >2 weeks. Use of Fixed Combinations When used in fixed combination with other agents (e.g., acetaminophen, phenylephrine), consider the cautions, precautions, and contraindications associated with the concomitant agent(s).

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
	with concomitant use of these agents. Corticosteroids should be used with caution in patients with diverticulitis, fresh intestinal anastomoses, active or latent peptic ulcer, and in nonspecific ulcerative colitis, if there is a probability of impending perforation, abscess or other pyogenic infection. Hematologic ASA and nonsteroidal anti-inflammatory agents should be used cautiously in conjunction with corticosteroids in patients with hypoprothrombinemia. Hepatic/Biliary/Pancreatic There is an enhanced effect of corticosteroids on patients with liver cirrhosis. Immune Prolonged use of corticosteroids increases susceptibility to infections. It may mask some signs of infection, and new infections (viral, bacterial, protozoan or helminthic) may appear in any location in the body during their use. There may be decreased resistance and inability to localize infection when corticosteroids are used. If corticosteroids must be used in the presence of bacterial infections, institute appropriate anti-infective therapy. Patients exposed to certain infections (e.g., measles, chickenpox) should seek medical advice as these diseases may have a more serious course in patients taking corticosteroids. Systemic corticosteroids should only be used in active tuberculosis in cases of fulminating or disseminated tuberculosis for the management of	such conditions there is the potential for rapid systemic absorption. In patients under general anesthesia who are paralyzed, higher plasma concentrations may occur than in spontaneously breathing patients. Unparalyzed patients are more likely to swallow a large proportion of the dose, which then undergoes considerable first-pass hepatic metabolism following absorption from the gut. Avoid contact with eyes. Many drugs used during the conduct of anesthesia are considered potential triggering agents for familial malignant hyperthermia. It has been shown that the use of amide local anesthetics in malignant hyperthermia patients is safe. However, there is no guarantee that neural blockade will prevent the development of malignant hyperthermia during surgery. It is also difficult to predict the need for supplemental general anesthesia. Therefore, a standard protocol for the management of malignant hyperthermia should be available. When topical anesthetics are used in the mouth, the patient should be aware that the production of topical anesthesia may impair swallowing and thus enhance the danger of aspiration. Numbness of the tongue or buccal mucosa may enhance the danger of unintentional biting trauma. Food or chewing gum should not be taken while the mouth or throat area is anesthetized. See also Part III: Consumer Information. pms-LIDOCAINE VISCOUS 2% is ineffective when applied		

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
	the disease in conjunction with an appropriate antituberculous regimen. If corticosteroids are indicated in patients with latent tuberculosis or tuberculin reactivity, close observation is necessary as reactivation of the disease may occur. During prolonged corticosteroid therapy, these patients should receive chemoprophylaxis. Systemic corticosteroids may activate latent amebiasis. Amebiasis should be ruled out before giving corticosteroids to a patient who has spent time in the tropics or has unexplained diarrhea. Use corticosteroids with extreme caution in patients with known or suspected parasitic infections. The National Advisory Committee on Immunization (NACI) recommends that at least 4 weeks should elapse between high-dose corticosteroid use and administration of both inactivated and component vaccines. If corticosteroid therapy cannot be stopped, live vaccines are generally contraindicated. Unless urgently needed, inactivated vaccines are generally also contraindicated. Corticosteroid therapy is not a contraindication to vaccine administration when therapy is for ≤ 14 days; or at low dose (prednisone-equivalent dose of ≤ 2 mg/kg per day for a child or ≤ 20 mg per day for an adult); or long-term, alternate-day treatment with short-acting preparations; or maintenance physiologic replacement therapy; or locally injected (e.g., joint injection) [Canadian immunization guide, 2013].	to intact skin. Lidocaine has been shown to be porphyrinogenic in animal models. pms-LIDOCAINE VISCOUS 2% should only be prescribed to patients with acute porphyria on strong or urgent indications, when they can be closely monitored. Appropriate precautions should be taken for all porphyric patients. Cardiovascular pms-LIDOCAINE VISCOUS 2% should be used with caution in patients with bradycardia or impaired cardiovascular function since they may be less able to compensate for functional changes associated with the prolongation of A-V conduction produced by amide-type local anesthetics. pms-LIDOCAINE VISCOUS 2% should be used with caution in patients in severe shock. Neurologic <u>Epilepsy:</u> The risk of central nervous system side effects when using lidocaine in patients with epilepsy is very low, provided that the dose recommendations are followed (See DOSAGE AND ADMINISTRATION). <u>Locomotion and Coordination:</u> Topical lidocaine formulations generally result in low plasma concentrations because of a low degree of systemic absorption. However, depending on the dose, local anesthetics may have a very mild effect on mental function and coordination even in the absence of overt CNS toxicity and may temporarily impair locomotion and alertness.		

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	Musculoskeletal Corticosteroid injections should be avoided in both Achilles & patellar tendinopathy due to risk of tendon rupture [BMC Musculoskelet Disord 2010;11:206]. Systemic corticosteroid therapy has been associated with loss of bone density and osteoporosis, which are reversible after discontinuation of therapy. Adults taking systemic corticosteroids chronically should maintain a daily intake of at least 1200 mg of calcium (from dietary sources and supplements) and 800–1000 units of vitamin D to prevent corticosteroid-induced osteoporosis. Bisphosphonates (e.g., alendronate, risedronate, zoledronic acid) are used to treat or prevent corticosteroid-induced osteoporosis and should be prescribed to patients at risk, e.g., with chronic corticosteroid therapy (≥ 7.5 mg prednisone equivalent daily for longer than 3 months, or less if other risk factors are present) [Cochrane Database Syst Rev 2016;(10):CD001347] (see Bisphosphonates (CPhA Monograph)). When corticosteroids are used in myasthenia gravis, hospitalization with careful observation is recommended because a transient worsening of symptoms, possibly leading to respiratory distress, may precede clinical improvement. Ophthalmologic Corticosteroids should be used cautiously in patients with ocular herpes simplex because of possible corneal ulceration and perforation. Prolonged use of corticosteroids may	Renal Lidocaine is metabolized primarily by the liver to monoethylglycinexylidide (MEGX, which has some CNS activity), and then further to metabolites glycinexylidide (GX) and 2,6- dimethylaniline (see ACTION AND CLINICAL PHARMACOLOGY). Only a small fraction (2%) of lidocaine is excreted unchanged in the urine. The pharmacokinetics of lidocaine and its main metabolite were not altered significantly in haemodialysis patients (n = 4) who received an intravenous dose of lidocaine. Therefore, renal impairment is not expected to significantly affect the pharmacokinetics of lidocaine when pms-LIDOCAINE VISCOUS 2% is used for short treatment durations, according to dosage instructions (see DOSAGE AND ADMINISTRATION). Caution is recommended when lidocaine is used in patients with severely impaired renal function because lidocaine metabolites may accumulate during long term treatment (see DOSAGE AND ADMINISTRATION). Hepatic Because amide-type local anesthetics such as lidocaine are metabolized by the liver, these drugs, especially repeated doses, should be used cautiously in patients with hepatic disease. Patients with severe hepatic disease, because of their inability to metabolize local anesthetics normally, are at greater risk of developing toxic plasma concentrations. Sensitivity pms-LIDOCAINE VISCOUS 2% should be used with caution in		

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
	produce posterior subcapsular cataracts, glaucoma with possible damage to the optic nerves and may enhance the establishment of secondary ocular infections due to fungi or viruses. Perioperative Considerations Prior to any surgery (including dental procedures), the health-care practitioner should be advised of current or recent corticosteroid therapy. Psychiatric Corticosteroid therapy can cause mental or mood disturbances including hypomania, mania, depression and psychosis. These reactions appear to be dose-related and are more commonly seen in the first few weeks of therapy, but are sometimes seen following sharp decreases in corticosteroid dosage or during pulse therapy. Pre-existing psychiatric conditions may be exacerbated by corticosteroid use. Renal Hydrocortisone or cortisone can cause elevation of blood pressure, salt and water retention and increased potassium excretion. These effects are less likely to occur with the synthetic derivatives (except fludrocortisone) unless these are used in large doses. Dietary salt restriction and potassium supplementation may be necessary. All corticosteroids increase calcium excretion. Edema may occur in the presence of renal disease with a fixed or decreased glomerular filtration rate. Caution is advised when corticosteroids are used in	persons with known drug sensitivities. pms-LIDOCAINE VISCOSUS 2% is contraindicated in patients with known hypersensitivities to local anesthetics of the amide type, to other components in the formulation, methylparaben and/or propylparaben (preservatives) and their metabolite para amino benzoic acid (PABA). The use of paraben-containing lidocaine preparations should also be avoided in patients who are allergic to ester local anesthetics (see CONTRAINDICATIONS). Special Populations Debilitated patients, acutely ill patients and patients with sepsis should be given reduced doses commensurate with their age, weight and physical condition because they may be more sensitive to systemic effects due to increased blood levels of lidocaine following repeated doses. <u>Pregnant Women:</u> There are no adequate and well-controlled studies in pregnant women on the effect of lidocaine on the developing fetus. It is reasonable to assume that a large number of pregnant women and women of child-bearing age have been given lidocaine. No specific disturbances to the reproductive process have so far been reported, e.g. no increased incidence of malformations. However, care should be given during early pregnancy when maximum organogenesis takes place. <u>Labour and Delivery:</u> Should pms-LIDOCAINE		

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
	patients with renal insufficiency, acute glomerulonephritis and chronic nephritis. Caution is required in patients with systemic sclerosis because of a possible link between use of high daily dose prednisone or prednisolone (>15 mg/day) and (possibly fatal) scleroderma renal crisis. Sensitivity/Resistance Rare instances of anaphylactoid reactions have occurred in patients receiving parenteral corticosteroid therapy [Int J Urol 2004;11(3):171-4]. Appropriate precautionary measures should be taken prior to parenteral administration, especially when the patient has a history of allergy to any drug. Some corticosteroid products contain tartrazine and sodium bisulfite, both of which may cause severe allergic-type reactions in susceptible individuals. Special Populations <u>Pregnant Women:</u> The use of systemic corticosteroids in pregnant women has not been associated with an increased incidence of major fetal malformations. However, the incidence of oral cleft may be increased [Teratology 2000;62(6):385-92]. Monitoring of neonates for signs of expected physiologic effects of exogenous corticosteroids is recommended, especially if high doses were used during pregnancy. <u>Nursing Women:</u> The extent of corticosteroids transferred into breast milk is thought to be clinically insignificant. The use of systemic corticosteroid therapy is generally considered to	VISCOUS 2% be used concomitantly with other products containing lidocaine during labour and delivery, the total dose contributed by all formulations must be kept in mind. <u>Nursing Women:</u> Lidocaine and its metabolites are excreted in the breast milk. At therapeutic doses the quantities of lidocaine and its metabolites in breast milk are small and generally are not expected to be a risk for the infant. <u>Pediatrics:</u> Postmarketing cases of seizures, cardiopulmonary arrest, and death in patients under the age of 3 years have been reported with use of lidocaine hydrochloride solution due to accidental ingestion, or accidental overdose when it was not administered in strict adherence to the dosing and administration recommendations. pms-LIDOCAINE VISCOUS 2% should not be administered to infants and children for teething pain. pms-LIDOCAINE VISCOUS 2% should be used with caution in children under the age of 2 as there is insufficient data to support the safety and efficacy of this product in this patient population at this time. Use in this population should be limited to those situations where safer alternatives are not available or have been tried but failed. To decrease the risk of serious adverse events with use of pms-LIDOCAINE VISCOUS 2% solution, instruct caregivers to strictly adhere to the prescribed dose and frequency of administration and store the prescription bottle		

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<table><tr><th>Interacting Drug</th><th>Effect</th></tr><tr><td>Alcohol</td><td>Magnesium salts may potentiate the depressant effects of alcohol to affect the respiratory system or induce coma.</td></tr><tr><td>Allopurinol</td><td>Magnesium salts may potentiate the effects of allopurinol to cause blood dyscrasias.</td></tr><tr><td>Aluminum Hydroxide</td><td>Magnesium salts may potentiate the effects of aluminum hydroxide to cause constipation.</td></tr><tr><td>Amphotericin B (systemic)</td><td>Magnesium salts may potentiate the effects of amphotericin B to cause renal toxicity.</td></tr><tr><td>Amphotericin B (topical)</td><td>Magnesium salts may potentiate the effects of amphotericin B to cause skin irritation.</td></tr><tr><td>Aspirin</td><td>Magnesium salts may potentiate the effects of aspirin to cause bleeding.</td></tr><tr><td>Baclofen</td><td>Magnesium salts may potentiate the effects of baclofen to cause muscle weakness.</td></tr><tr><td>Benzodiazepines</td><td>Magnesium salts may potentiate the effects of benzodiazepines to cause sedation.</td></tr><tr><td>Calcium Channel Blockers</td><td>Magnesium salts may potentiate the effects of calcium channel blockers to cause hypotension.</td></tr><tr><td>Cisapride</td><td>Magnesium salts may potentiate the effects of cisapride to cause arrhythmias.</td></tr><tr><td>Clozapine</td><td>Magnesium salts may potentiate the effects of clozapine to cause agranulocytosis.</td></tr><tr><td>Cocaine</td><td>Magnesium salts may potentiate the effects of cocaine to cause arrhythmias.</td></tr><tr><td>Cyclosporin</td><td>Magnesium salts may potentiate the effects of cyclosporin to cause nephrotoxicity.</td></tr><tr><td>Diazepam</td><td>Magnesium salts may potentiate the effects of diazepam to cause sedation.</td></tr><tr><td>Digoxin</td><td>Magnesium salts may potentiate the effects of digoxin to cause arrhythmias.</td></tr><tr><td>Ethanol</td><td>Magnesium salts may potentiate the effects of ethanol to cause hypotension.</td></tr><tr><td>Fentanyl</td><td>Magnesium salts may potentiate the effects of fentanyl to cause respiratory depression.</td></tr><tr><td>Halothane</td><td>Magnesium salts may potentiate the effects of halothane to cause arrhythmias.</td></tr><tr><td>Heparin</td><td>Magnesium salts may potentiate the effects of heparin to cause bleeding.</td></tr><tr><td>Insulin</td><td>Magnesium salts may potentiate the effects of insulin to cause hypoglycemia.</td></tr><tr><td>Isoniazid</td><td>Magnesium salts may potentiate the effects of isoniazid to cause peripheral neuropathy.</td></tr><tr><td>Lidocaine</td><td>Magnesium salts may potentiate the effects of lidocaine to cause arrhythmias.</td></tr><tr><td>Lithium</td><td>Magnesium salts may potentiate the effects of lithium to cause toxicity.</td></tr><tr><td>Morphine</td><td>Magnesium salts may potentiate the effects of morphine to cause respiratory depression.</td></tr><tr><td>Naloxone</td><td>Magnesium salts may potentiate the effects of naloxone to cause respiratory depression.</td></tr><tr><td>Nifedipine</td><td>Magnesium salts may potentiate the effects of nifedipine to cause hypotension.</td></tr><tr><td>Phenobarbital</td><td>Magnesium salts may potentiate the effects of phenobarbital to cause sedation.</td></tr><tr><td>Phenytoin</td><td>Magnesium salts may potentiate the effects of phenytoin to cause arrhythmias.</td></tr><tr><td>Propofol</td><td>Magnesium salts may potentiate the effects of propofol to cause respiratory depression.</td></tr><tr><td>Quinidine</td><td>Magnesium salts may potentiate the effects of quinidine to cause arrhythmias.</td></tr><tr><td>Rifampin</td><td>Magnesium salts may potentiate the effects of rifampin to cause arrhythmias.</td></tr><tr><td>Sedatives</td><td>Magnesium salts may potentiate the effects of sedatives to cause respiratory depression.</td></tr><tr><td>Succinylcholine</td><td>Magnesium salts may potentiate the effects of succinylcholine to cause respiratory depression.</td></tr><tr><td>Tetracycline</td><td>Magnesium salts may potentiate the effects of tetracycline to cause arrhythmias.</td></tr><tr><td>Thiazides</td><td>Magnesium salts may potentiate the effects of thiazides to cause hypotension.</td></tr><tr><td>Valproic Acid</td><td>Magnesium salts may potentiate the effects of valproic acid to cause arrhythmias.</td></tr><tr><td>Vincristine</td><td>Magnesium salts may potentiate the effects of vincristine to cause arrhythmias.</td></tr><tr><td>Vitamin K</td><td>Magnesium salts may potentiate the effects of vitamin K to cause bleeding.</td></tr><tr><td>Xanthines</td><td>Magnesium salts may potentiate the effects of xanthines to cause arrhythmias.</td></tr><tr><td>Zinc</td><td>Magnesium salts may potentiate the effects of zinc to cause arrhythmias.</td></tr></table>	Interacting Drug	Effect	Alcohol	Magnesium salts may potentiate the depressant effects of alcohol to affect the respiratory system or induce coma.	Allopurinol	Magnesium salts may potentiate the effects of allopurinol to cause blood dyscrasias.	Aluminum Hydroxide	Magnesium salts may potentiate the effects of aluminum hydroxide to cause constipation.	Amphotericin B (systemic)	Magnesium salts may potentiate the effects of amphotericin B to cause renal toxicity.	Amphotericin B (topical)	Magnesium salts may potentiate the effects of amphotericin B to cause skin irritation.	Aspirin	Magnesium salts may potentiate the effects of aspirin to cause bleeding.	Baclofen	Magnesium salts may potentiate the effects of baclofen to cause muscle weakness.	Benzodiazepines	Magnesium salts may potentiate the effects of benzodiazepines to cause sedation.	Calcium Channel Blockers	Magnesium salts may potentiate the effects of calcium channel blockers to cause hypotension.	Cisapride	Magnesium salts may potentiate the effects of cisapride to cause arrhythmias.	Clozapine	Magnesium salts may potentiate the effects of clozapine to cause agranulocytosis.	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Lithium	Magnesium salts may potentiate the effects of lithium to cause toxicity.	Morphine	Magnesium salts may potentiate the effects of morphine to cause respiratory depression.	Naloxone	Magnesium salts may potentiate the effects of naloxone to cause respiratory depression.	Nifedipine	Magnesium salts may potentiate the effects of nifedipine to cause hypotension.	Phenobarbital	Magnesium salts may potentiate the effects of phenobarbital to cause sedation.	Phenytoin	Magnesium salts may potentiate the effects of phenytoin to cause arrhythmias.	Propofol	Magnesium salts may potentiate the effects of propofol to cause respiratory depression.	Quinidine	Magnesium salts may potentiate the effects of quinidine to cause arrhythmias.	Rifampin	Magnesium salts may potentiate the effects of rifampin to cause arrhythmias.	Sedatives	Magnesium salts may potentiate the effects of sedatives to cause respiratory depression.	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When lidocaine is used topically, plasma concentrations are of importance for safety reasons (see WARNINGS AND PRECAUTIONS, General; ADVERSE REACTIONS). However, with the low systemic exposure and short duration of topical application, the above mentioned metabolic drug-drug interactions are not expected to be of clinical significance when pms-LIDOCAINE VISCOUS 2% is used according to dosage recommendations. Clinically relevant pharmacodynamic drug interactions may occur with lidocaine and other local anesthetics or structurally related drugs, and Class I and Class III antiarrhythmic drugs due to additive effects. Drug-Drug Interaction: <u>Local anesthetics and agents structurally related to amide-type local anesthetics</u> pms-LIDOCAINE VISCOUS 2% should be used with caution in patients receiving other local anesthetics or agents structurally related to amide-type local anesthetics (e.g. antiarrhythmics such as mexiletine), since the toxic effects are additive. <u>Antiarrhythmic Drugs</u> <u>Class I Antiarrhythmic drugs</u> Class I antiarrhythmic drugs (such as mexiletine)		
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Digoxin	Magnesium salts may potentiate the effects of digoxin to cause arrhythmias.																																																																																					
Ethanol	Magnesium salts may potentiate the effects of ethanol to cause hypotension.																																																																																					
Fentanyl	Magnesium salts may potentiate the effects of fentanyl to cause respiratory depression.																																																																																					
Halothane	Magnesium salts may potentiate the effects of halothane to cause arrhythmias.																																																																																					
Heparin	Magnesium salts may potentiate the effects of heparin to cause bleeding.																																																																																					
Insulin	Magnesium salts may potentiate the effects of insulin to cause hypoglycemia.																																																																																					
Isoniazid	Magnesium salts may potentiate the effects of isoniazid to cause peripheral neuropathy.																																																																																					
Lidocaine	Magnesium salts may potentiate the effects of lidocaine to cause arrhythmias.																																																																																					
Lithium	Magnesium salts may potentiate the effects of lithium to cause toxicity.																																																																																					
Morphine	Magnesium salts may potentiate the effects of morphine to cause respiratory depression.																																																																																					
Naloxone	Magnesium salts may potentiate the effects of naloxone to cause respiratory depression.																																																																																					
Nifedipine	Magnesium salts may potentiate the effects of nifedipine to cause hypotension.																																																																																					
Phenobarbital	Magnesium salts may potentiate the effects of phenobarbital to cause sedation.																																																																																					
Phenytoin	Magnesium salts may potentiate the effects of phenytoin to cause arrhythmias.																																																																																					
Propofol	Magnesium salts may potentiate the effects of propofol to cause respiratory depression.																																																																																					
Quinidine	Magnesium salts may potentiate the effects of quinidine to cause arrhythmias.																																																																																					
Rifampin	Magnesium salts may potentiate the effects of rifampin to cause arrhythmias.																																																																																					
Sedatives	Magnesium salts may potentiate the effects of sedatives to cause respiratory depression.																																																																																					
Succinylcholine	Magnesium salts may potentiate the effects of succinylcholine to cause respiratory depression.																																																																																					
Tetracycline	Magnesium salts may potentiate the effects of tetracycline to cause arrhythmias.																																																																																					
Thiazides	Magnesium salts may potentiate the effects of thiazides to cause hypotension.																																																																																					
Valproic Acid	Magnesium salts may potentiate the effects of valproic acid to cause arrhythmias.																																																																																					
Vincristine	Magnesium salts may potentiate the effects of vincristine to cause arrhythmias.																																																																																					
Vitamin K	Magnesium salts may potentiate the effects of vitamin K to cause bleeding.																																																																																					
Xanthines	Magnesium salts may potentiate the effects of xanthines to cause arrhythmias.																																																																																					
Zinc	Magnesium salts may potentiate the effects of zinc to cause arrhythmias.																																																																																					

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
		should be used with caution since toxic effects are additive and potentially synergistic. <i>Class III Antiarrhythmic drugs</i> Caution is advised when using Class III antiarrhythmic drugs concomitantly with lidocaine due to potential pharmacodynamic or pharmacokinetic interactions with lidocaine, or both. A drug interaction study has shown that the plasma concentration of lidocaine may be increased following administration of a therapeutic dose of intravenous lidocaine to patients treated with amiodarone (n = 6). Case reports have described toxicity in patients treated concomitantly with lidocaine and amiodarone. Patients treated with Class III antiarrhythmic drugs (e.g. amiodarone) should be kept under close surveillance and ECG monitoring should be considered, since cardiac effects of these drugs and lidocaine may be additive. <u>Strong Inhibitors of CYP1A2 and CYP3A4</u> Cytochrome CYP1A2 and CYP3A4 are involved in the formation of the pharmacologically active lidocaine metabolite MEGX. <i>Fluvoxamine</i>: Strong inhibitors of CYP1A2, such as fluvoxamine, given during prolonged administration of lidocaine to areas with a high extent of systemic absorption (e.g., mucous membranes) can cause a metabolic interaction leading to an increased lidocaine plasma concentration. The plasma clearance of a single intravenous dose of lidocaine was reduced by		

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
		41 to 60% during co administration of fluvoxamine, a selective and potent CYP1A2 inhibitor, to healthy volunteers. <i>Erythromycin and Itraconazole:</i> Erythromycin and itraconazole, which are strong inhibitors of CYP3A4, have been shown to reduce clearance of lidocaine by 9 to 18%, following a single intravenous dose of lidocaine to healthy volunteers. During combined co-administration with fluvoxamine and erythromycin the plasma clearance of lidocaine was reduced by 53%. <u><i>β-blockers and cimetidine</i></u> Following a single intravenous dose of lidocaine, administered to healthy volunteers, the clearance of lidocaine has been reported to be reduced up to 47% when co-administered with propranolol and up to 30% when co-administered with cimetidine. Reduced clearance of lidocaine when co-administered with these drugs is probably due to reduced liver blood flow and/or inhibition of microsomal liver enzymes. The potential for clinically significant interactions with these drugs should be considered during long-term treatment with high doses of lidocaine.		

POSOLOGIE ET ADMINISTRATION

Liquid formulation of magnesium hydroxide: 80 mg/ml suspension Magnesium hydroxide suspension: shake well before swallowing. In general, liquid suspensions of magnesium hydroxide are faster acting and more	Oral hydrocortisone: Tablets 10 mg, 20 mg Intramuscular, intravenous hydrocortisone sodium succinate: Powder for injection 100 mg, 250 mg, 500 mg, 1 g Oral dexamethasone: Tablets 0.5 mg, 0.75 mg,	Lidocaine Hydrochloride Oral Topical Solution: 20 mg/ml (liquid 2%) General When pms-LIDOCAINE VISCOUS 2% is used concomitantly with other products containing lidocaine, the total dose contributed by all	Oral nystatin: Powder 3000 units/mg Oral nystatin: Suspension: 100 000 units/mL Shake oral suspension well prior to use. Swish and gargle; retain in the	https://www.drugs.com/mo-nograph/diphenhydramine.html Administration Administer diphenhydramine hydrochloride orally or by IV or deep IM injection. Administer diphenhydramine citrate-
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Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
effective than tablets. Magnesium hydroxide suspension should be stored below 35°C but prevented from freezing. It should be well shaken before use since separation of water from the suspension occurs on standing.	2 mg, 4 mg Oral dexamethasone: Elixir 0.5 mg/5mL Intralesional, intramuscular, intravenous, soft tissue injection dexamethasone sodium phosphate: Parenteral solution 4 mg/mL, 10 mg/mL Intra-articular, intrabursal, intramuscular triamcinolone acetonide: Parenteral suspension 40 mg/mL Intra-articular, intrabursal, intradermal, injection into tendons triamcinolone acetonide: Parenteral suspension 10 mg/mL Dosage ranges for corticosteroids are extremely wide and patient responses are variable. Dosage should be individualized according to the diagnosis, severity, prognosis, probable duration of disease, patient response and tolerance. In the management of acute disorders, corticosteroid dosage should be sufficient to ensure that symptoms are controlled quickly, and treatment should be discontinued as soon as possible. In acute conditions where prompt relief is imperative, large doses are permissible and may be necessary for a short period. Use of corticosteroids should not replace or delay specific measures to treat the acute condition. Corticosteroid use does not alter disease progression. In chronic conditions requiring long-term therapy, use the lowest dosage that provides adequate but not necessarily complete	formulations must be kept in mind. The degree of absorption from mucous membranes is variable but especially high from the bronchial tree. The degree of systemic absorption depends on whether the lidocaine viscous is swallowed or expectorated. It is therefore important to expectorate in order to avoid unnecessary absorption. After a swallowed single dose of 300 mg (15 ml) of lidocaine viscous, the resulting blood concentrations are low in adults. Special Populations Pediatric patients: pms-LIDOCAINE VISCOUS 2% should not be administered to soothe teething pain in infants and children, and should be used only as a last resort in children under the age of 2, when safer alternatives are not available or have been tried but failed. There is insufficient data to support the safety and efficacy of this product in this patient population at this time. Care must be taken to ensure correct dosage in all pediatric patients as there have been cases of overdose due to inappropriate dosing. pms-LIDOCAINE VISCOUS 2% should also be used with caution in patients with epilepsy, impaired cardiac conduction, bradycardia, impaired hepatic or renal function and in severe shock (See WARNINGS AND PRECAUTIONS). Debilitated, elderly patients, acutely ill patients, patients with sepsis, and children	mouth for as long as possible prior to swallowing. Store oral powder in a refrigerator (2–8°C). Store all other dosage forms at 15–30°C.	containing preparations orally. IV Administration For solution and drug compatibility information, see Compatibility under Stability. IV injection preferred over deep IM injection. IV use in a home-care setting should be employed under careful supervision. Rate of Administration ≤25 mg/minute. Dosage Available as diphenhydramine hydrochloride and diphenhydramine citrate; dosage is expressed in terms of diphenhydramine hydrochloride or diphenhydramine citrate. Diphenhydramine citrate available only in fixed-combination preparations. 12.5 mg diphenhydramine hydrochloride equivalent to 19 mg diphenhydramine citrate. Fixed-combination preparations do not permit individual titration of dosages. When used in fixed combination with other agents (e.g., acetaminophen, phenylephrine), select a dosage that is within the usual therapeutic range for each ingredient. Because combinations and dosage strengths vary for fixed-combination preparations, consult manufacturer's product labeling for appropriate dosage of the specific preparation. Pediatric Patients Allergic Conditions and the Common Cold Acute Allergic Reactions IV or IM Children >1 month of age: 5 mg/kg daily or 150 mg/m2 daily (up to a

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
	relief. If a high dosage for prolonged periods is considered essential, observe patients closely for signs that might necessitate reduction in dosage or discontinuation of the drug. Chronic conditions are subject to periods of remission. When such periods occur, consider discontinuing corticosteroids gradually. Continued supervision of the patient after cessation of corticosteroids is essential since there may be a reappearance of severe manifestations of the disease. Alternate day therapy in which a single dose is administered every other morning may be considered for long-term corticosteroid treatment of most conditions; however, this remains controversial. Morning administration of the drug simulates the natural circadian rhythm of corticosteroid secretion, which is high in the morning and low in the evening. This regimen may provide relief of symptoms while minimizing adrenal suppression, cushingoid state, withdrawal symptoms and growth suppression in children. Intermediate-acting agents should be used for alternate day therapy (see Table 5). Dexamethasone is not suitable for every other day dosing to minimize adrenal suppression due to its long duration of effect. Dosage should be decreased or discontinued gradually when the drug has been administered for more than a few weeks to minimize the risk of adrenal insufficiency, as adrenal suppression has occurred after as little as 2 weeks of corticosteroid therapy. A number of different regimens for	should be given reduced doses commensurate with their age, weight and physical condition. Mode of administration: pms-LIDOCAINE VISCOS 2% IS FOR ORAL TOPICAL USE ONLY AND MUST NOT BE USED FOR INJECTION (see WARNINGS AND PRECAUTIONS). <u>Adults (18 years of age and older):</u> - For oral analgesia, the solution should be swished around in the mouth and spat out or swallowed slowly. - For use in the pharynx, the solution should be gargled and may be swallowed. <u>Children 2 to <18 years of age:</u> - The solution should not be swallowed. Children should swish or gargle the solution, then spit it out. - For young children with difficulty spitting out the solution, the dose and solution must be accurately measured and applied, to the affected area only, with a cotton tip applicator. <u>Children <3 years of age</u> - If treatment with pms-LIDOCAINE VISCOS 2% solution is considered necessary (i.e. other available options have failed), the solution must be accurately measured and applied, to the affected area only, with a cotton tip applicator. Recommended dose and dosage adjustment: <u>Adults</u> For treatment of pain from irritated or inflamed mucous membranes of the mouth and throat, 5 ml to 10 ml of pms-		maximum of 300 mg daily) divided in 4 doses. Alternatively, 1–2 mg/kg recommended by some experts. Allergic Rhinitis and the Common Cold Oral Self-medication in children 2–5 years of age: 6.25 mg every 4–6 hours (as diphenhydramine hydrochloride) or 9.5 mg every 4 hours (as diphenhydramine citrate) when directed by a clinician; do not exceed 37.5 mg (as diphenhydramine hydrochloride) or 57 mg (as diphenhydramine citrate) in 24 hours. (See Pediatric Use under Cautions.) Self-medication in children 6–11 years of age: 12.5–25 mg every 4–6 hours (as diphenhydramine hydrochloride) or 19 mg every 4 hours (as diphenhydramine citrate); do not exceed 150 mg (as diphenhydramine hydrochloride) or 76 mg (as diphenhydramine citrate) in 24 hours. Self-medication in children ≥12 years of age: 25–50 mg every 4–6 hours (as diphenhydramine hydrochloride) or 38 mg every 4 hours (as diphenhydramine citrate); do not exceed 300 mg (as diphenhydramine hydrochloride) or 152 mg (as diphenhydramine citrate) in 24 hours. Insomnia Oral Children 2–11 years of age†: 1 mg/kg (as diphenhydramine hydrochloride) 30 minutes before retiring; do not exceed 50 mg. Self-medication in children ≥12 years of age: 50 mg (as diphenhydramine

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
	tapering corticosteroid therapy have been described. One regimen is to reduce the dosage by the equivalent of 2.5–5 mg of prednisone every 3–4 days. An increase in dose followed by a more gradual withdrawal may be necessary if the disease flares up during tapering. Renal Impairment: No dosage adjustment is necessary. Hepatic Impairment: Corticosteroid effects may be enhanced in hepatic impairment. Monitor therapy for increased effects and consider adjusting dose of corticosteroids if needed. Oral formulations should be administered with or after meals to minimize GI upset.	LIDOCAINE VISCOUS 2% (100 mg - 200 mg lidocaine hydrochloride) is recommended, per dose. Wait at least 3 hours between doses. No more than six doses may be given in 24 hours. Total dosage of pms-LIDOCAINE VISCOUS 2% in 24 hours should not exceed 60 ml or 1200 mg lidocaine hydrochloride. For topical anesthesia before introduction of instruments and catheters into the upper respiratory or digestive tracts, 10 ml - 15 ml of pms-LIDOCAINE VISCOUS 2% (200 mg - 300 mg lidocaine hydrochloride) is recommended. When combined with other lidocaine products (e.g. for bronchoscopy), the total dosage of lidocaine hydrochloride should not exceed 400 mg. For diseases of the upper gastrointestinal tract, 5 ml - 15 ml of pms-LIDOCAINE VISCOUS 2% (100 mg - 300 mg of lidocaine hydrochloride) should be swallowed quickly in one gulp. Wait at least 3 hours between doses. Six doses may be given in 24 hours. Total dosage of pms-LIDOCAINE VISCOUS 2% in 24 hours should not exceed 60 ml or 1200 mg lidocaine hydrochloride. <u>Pediatric patients >12 years of age, or younger but weighing ≥50 kg</u> For children over 12 years of age, or children weighing 50 kg or more, for treatment of irritated or inflamed mucous membranes of the mouth and throat, a dose of 5 mL-10 ml of pms-LIDOCAINE VISCOUS 2% (100 mg - 200 mg lidocaine hydrochloride) is recommended. The dose should be adjusted commensurate with weight and physical		hydrochloride) or 76 mg (as diphenhydramine citrate) at bedtime as needed, or as directed by a clinician. Higher dosages do not produce substantially greater benefit but may be associated with a higher incidence of adverse (e.g., anticholinergic) effects. Use not recommended for ≥7–10 nights. Motion Sickness Oral Children 2–5 years of age†: 6.25 mg (as diphenhydramine hydrochloride) 30–60 minutes before travel and every 4–6 hours during travel; do not exceed 37.5 mg in 24 hours. Self-medication in children 6–11 years of age: 12.5–25 mg (as diphenhydramine hydrochloride) 30–60 minutes before travel and every 4–6 hours during travel; do not exceed 150 mg in 24 hours. Self-medication in children ≥12 years of age: 25–50 mg (as diphenhydramine hydrochloride) 30 minutes before exposure to motion and then every 4–6 hours (before meals and at bedtime) for duration of exposure; do not exceed 300 mg in 24 hours. IV or IM Children >1 month of age: 5 mg/kg daily or 150 mg/m² daily (up to a maximum of 300 mg daily) divided in 4 doses. Parkinsonian Syndrome IV or IM Children >1 month of age: 5 mg/kg daily or 150 mg/m² daily (up to a maximum of 300 mg daily) divided in 4 doses. Adults Allergic Conditions and the Common Cold Acute Allergic Reactions IV or IM

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
		condition. Wait at least 3 hours between doses. No more than four doses should be given during 24 hours. <u>Pediatric patients 2 – 12 years of age, or older and weighing <50kg</u> In patients 2 -12 years of age who weigh less than 50 kg, for treatment of irritated or inflamed mucous membranes of the mouth and throat, the dose should not exceed 4 mg/kg of lidocaine hydrochloride (0.2 mL/kg) and should be adjusted based on weight and physical condition. After swishing, pms-LIDOCAINE VISCOUS 2% should be spat out, not swallowed. If they have trouble spitting it out, it should be applied with a cotton tip applicator. Wait at least 3 hours between doses. No more than four doses should be given during 24 hours. <u>Children <3 years of age</u> If treatment with pms-LIDOCAINE VISCOUS 2% solution is considered necessary (i.e. as a last resort) for infants and children under 3 years of age, pms-LIDOCAINE VISCOUS 2% solution must be accurately measured and applied to the affected area only with a cotton tip applicator (see WARNINGS AND PRECAUTIONS-Special Populations). • The maximum dosage for the treatment of infants and children under 3 years of age is 4 mg/kg. • Wait at least 3 hours between doses. No more than four doses should be given during 24 hours. At the present time there is not enough documentation to allow recommendations for a more prolonged use of viscous lidocaine in children under the age		10–50 mg; in a few patients, up to 100 mg may be required. Alternatively, 25–50 mg recommended by some experts. Allergic Rhinitis and the Common Cold Oral Self-medication: 25–50 mg every 4–6 hours (as diphenhydramine hydrochloride) or 38 mg every 4 hours (as diphenhydramine citrate); do not exceed 300 mg (as diphenhydramine hydrochloride) or 152 mg (as diphenhydramine citrate) in 24 hours. Insomnia Oral Self-medication: 50 mg (as diphenhydramine hydrochloride) or 76 mg (as diphenhydramine citrate) at bedtime as needed, or as directed by a clinician. Higher dosages do not produce substantially greater benefit but may be associated with a higher incidence of adverse (e.g., anticholinergic) effects. Use not recommended for ≥7–10 nights. Motion Sickness Oral Self-medication: 25–50 mg (as diphenhydramine hydrochloride) 30 minutes before exposure to motion and then every 4–6 hours (before meals and at bedtime) for duration of exposure; do not exceed 300 mg in 24 hours. IV or IM 10–50 mg; in a few patients, up to 100 mg may be required. Parkinsonian Syndrome Oral Initially, 25 mg 3 times daily (as diphenhydramine hydrochloride). If necessary, gradually

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
		of 2. Do not use this product to treat teething pain in infants and children. Onset of action: After application of pms-LIDOCAINE VISCOUS 2%, local anesthesia is achieved within 5 minutes. Duration of anesthesia is approximately 20 - 30 minutes. LIDOCAINE VISCOUS 2% is ineffective when applied to intact skin.		increase dosage to 50 mg 4 times daily. IV or IM 10–50 mg; in a few patients, up to 100 mg may be required.
EFFETS INDÉSIRABLES				
Taken orally, magnesium can cause nausea, vomiting and diarrhea. Magnesium oxide has the highest prevalence of diarrhea, while magnesium gluconate has the lowest. Rarely, larger amounts of magnesium may cause hypermagnesemia, which occurs predominantly in patients with renal insufficiency. Symptoms include thirst, decreased blood pressure, nausea and vomiting, flushing, muscle weakness, ECG changes, sedation, confusion, loss of tendon reflexes, respiratory paralysis, cardiac arrhythmias, coma, cardiac arrest and death.	More Common Adverse Drug Reactions (≥1%): - Hypertension - Acne - Cushing syndrome - Decreased rate of growth - Hyperglycemia - Adrenal suppression - Gastrointestinal ulcer (1.8%) - Osteoporosis - Cataract - Glaucoma - Depression	Adverse experiences following the administration of lidocaine are similar in nature to those observed with other amide local anesthetic agents. These adverse experiences are, in general, dose-related and may result from high plasma levels caused by overdosage or rapid absorption, or may result from a hypersensitivity, idiosyncrasy or diminished tolerance on the part of the patient. (See DOSAGE AND ADMINISTRATION, WARNINGS AND PRECAUTIONS, ACTION AND CLINICAL PHARMACOLOGY and OVERDOSAGE Serious adverse experiences are generally systemic in nature. The following types are those most commonly reported: Central Nervous System: CNS manifestations are excitatory and/or depressant and may be characterized by the following signs and symptoms of escalating severity: circumoral paresthesia, lightheadedness, apprehension, euphoria, confusion, dizziness, drowsiness, hyperacusis, tinnitus, blurred vision, vomiting, sensations of	Nystatin is generally well tolerated even with prolonged use. High oral doses may result in nausea, vomiting and diarrhea. Rash, irritation, urticaria and Stevens-Johnson syndrome have rarely been reported.	Sedation, sleepiness, dizziness, disturbed coordination, epigastric distress, thickening of bronchial secretions.

Magnesium salts: oral	Corticosteroids: systemic	Lidocaine viscous 2%	Nystatin	Diphenhydramine
		heat, cold or numbness, twitching, tremors, convulsions, unconsciousness, respiratory depression and arrest. The excitatory manifestations (e.g., twitching, tremors, convulsions) may be very brief or may not occur at all, in which case the first manifestation of toxicity may be drowsiness merging into unconsciousness and respiratory arrest. Drowsiness following the administration of lidocaine is usually an early sign of a high lidocaine plasma level and may occur as a consequence of rapid absorption. Cardiovascular System: Cardiovascular manifestations are usually depressant and are characterized by bradycardia, hypotension, arrhythmia and cardiovascular collapse, which may lead to cardiac arrest. Allergic: Allergic reactions are characterized by cutaneous lesions, urticaria, edema or, in the most severe instances, anaphylactic shock. Allergic reactions of the amide type are rare (<0.1%) and may occur as a result of sensitivity either to the local anesthetic agent or to other components in the formulation (See DOSAGE FORM, COMPOSITION AND PACKAGING).		

**Tableau E-8 Recettes provenant des GPC, des documents canadiens, du Logiciel
Vigilance et de Comité consultatif**

Nom	Recette	Volume total (ml)
ADULTE		
RBO#1	• Chlorhydrate de diphénhydramine (élixir 12,5 mg/5 ml; 120 ml) • Hydrocortisone micronisée (poudre; 50 mg) • Nystatine (suspension 100 000 unités/ml; 30 ml) • Eau purifiée ou eau stérile pour irrigation 240 ml	390
RBO#2	• Chlorhydrate de diphénhydramine (élixir 12,5 mg/5 ml; 2 ml) • Lidocaïne visqueuse (gel 2 %; 10 ml) • Hydroxyde d'aluminium/magnésium (suspension orale 200 mg + 200 mg/5 ml; 118 ml)	130
RBO#3	• Chlorhydrate de diphénhydramine (élixir 12,5 mg/5 ml; jusqu'à 100 ml) • Hydrocortisone micronisée (poudre; 20 mg) • Chlorhydrate de Tétracycline (suspension orale 25 mg/ml; 8 ml) • Nystatine (suspension 100 000 unités/ml; 4,8 ml)	100
RBO#4	• Chlorhydrate de diphénhydramine (élixir 12,5 mg/5 ml; 210 ml) • Hydrocortisone micronisée (poudre; 60 mg) • Nystatine (suspension 100 000 unités/ml; 30 ml)	240
RBO#5	• Hydrocortisone micronisée (poudre; 46 mg) • Tétracycline, chlorhydrate (suspension orale 25 mg/ml; 50 ml) • Nystatine (suspension 100 000 unités/ml; 12 ml) • Eau purifiée	100
RBO#6	• Chlorhydrate de diphénhydramine (élixir 12,5 mg/5 ml; 50 ml) • Lidocaïne visqueuse (gel 2 %; 50 ml) • Hydroxyde d'aluminium/magnésium+siméthicone (suspension orale 200 mg + 200 mg+25mg/5 ml; 50 ml)	150
RBO#8	• Hydrocortisone micronisée (poudre 50 mg) • Chlorphéniramine (comprimé 4 mg; 5 comp.) • Tétracycline, chlorhydrate (suspension orale 25 mg/ml; 50 ml) • Nystatine (suspension 100 000 unités/ml; 12 ml) • Eau purifiée	100
RBO#9	• Chlorhydrate de diphénhydramine (élixir 12,5 mg/5 ml; 465 ml) • Phosphate sodique de prednisolone (solution orale 1 mg/ml; 80 ml) • Chlorhydrate de tétracycline (capsule 10 mg; 25 caps.) • Nystatine (suspension 100 000 unités/ml; 84 ml) • Solution de chlorure de sodium 0,9 % (solution pour irrigation jusqu'à 1000 ml)	1000
RBO#10	• Chlorhydrate de diphénhydramine (solution orale 6,25 mg/5 ml; 200 ml) • Hydrocortisone (comprimé 10 mg; 5 comp.) • Nystatine (suspension 100 000 unités/ml; 30 ml) • Eau purifiée	250
RBO#11	• Chlorhydrate de diphénhydramine (solution orale 12,5 mg/5 ml; 120 ml) • Dexaméthasone phosphate sodique (solution injectable 4 mg/ml; 0,56 ml) • Nystatine suspension (100 000 unités/ml; 40 ml) • Eau distillée	200
RBO#12	• Chlorhydrate de diphénhydramine (solution orale 12,5 mg/5 ml; 120 ml) • Hydrocortisone (comprimé 10 mg; 5 comp.) • Nystatine (suspension 100 000 unités/ml; 40 ml) • Hydroxyde d'aluminium/hydroxyde de magnésium (suspension orale 200 mg + 200 mg/5 ml; jusqu'à 240 ml) • Eau distillée	240
RBO#13	• Hydroxyde d'aluminium/hydroxyde de magnésium 1:1 à 1:3 • Lidocaïne volumes variables	
RBO#14	• Diphénhydramine (élixir 12,5 mg/5 ml; 300 ml) • Succinate d'hydrocortisone (100 mg/2 ml; 2 ml) • Nystatine (suspension 100 000 U/ml; 100 ml) • Compléter à 1000 ml avec de l'eau stérile.	1000
RBO#15	• Diphénhydramine (solution orale 6,25 mg/5 ml; 200 ml) • Hydrocortisone (comprimé 10 mg; 50 mg) • Nystatine (suspension 100 000 U/ml; 30 ml) • Compléter à 250 ml avec de l'eau	250
RBO#16	• Diphénhydramine (élixir 12,5 mg/5 ml; 120 ml) • Hydrocortisone (comprimé 50 mg; 50 mg) • Nystatine (suspension 100 000 U/ml; 30 ml) • Eau distillée; 25 ml • Compléter à 240 ml avec de l'hydroxyde d'aluminium/hydroxyde de magnésium	240

Nom	Recette	Volume total (ml)
RBO#17	- Diphénhydramine (élixir 12,5 mg/5 ml; 120 ml) - Hydrocortisone (comprimé 10 mg; 50 mg) - Nystatine (suspension 100 000 U/ml; 25 ml)	195
RBO#18	- Diphénhydramine (élixir 12,5 mg/5 ml; 120 ml) - Hydrocortisone (comprimé 10 mg; 50 mg) - Nystatine (suspension 100 000 U/ml; 30 ml) - Eau distillée; 240 ml	390
RBO#19	- Diphénhydramine (élixir 12,5 mg/5 ml; 120 ml) - Dexaméthasone (4 mg/ml : 2,25 mg; 0,56 ml) - Nystatine (suspension 100 000 U/ml; 40 ml) - Compléter à 200 ml avec de l'eau distillée	200
RBO#20	- Hydrocortisone (comprimé 10 mg; 5 comp.) - Lidocaïne visqueuse (gel 2 %; 50 ml) - Chlorure de sodium (solution 0,9 %; 200 ml) - Nystatin (suspension 100 000 U/ml; 42 ml) - glycerine (solution 100 %; 4 ml)	296
ENFANTS		
RBOP#1	- Lidocaïne visqueuse (gel 2 %; 100 ml) - Cristal léger 0,8 % solution orale	170
RBOP#2	- Diphénhydramine (élixir 2,5 mg; 60 ml) - Lidocaïne visqueuse (gel 2 %; 60 ml) - Hydroxyde d'aluminium/hydroxyde de magnésium (suspension orale 200mg-200 mg/5 ml; 60 ml)	180
RBOP#3	- Diphénhydramine (50 mg/ml injectable; 12 ml) - Nystatine (suspension 100,000 unit/ml; 60 ml) - Eau stérile pour irrigation; 708 ml	780
RBOP#4	- Diphénhydramine (élixir 2,5 mg; 50 ml) - Nystatin (suspension 100,000 unit/ml; 20 ml) - Bicarbonate de sodium (poudre; 50 mg) - Eau stérile pour irrigation; 100 ml	100

ANNEXE F

Mandat du comité consultatif

Le comité consultatif a pour mandat d'accompagner les travaux de l'INESSS sur le projet précité afin d'assurer la crédibilité scientifique, la pertinence clinique et de pratique et l'acceptabilité professionnelle et sociale du produit livré, et ce, en fournissant des informations, de l'expertise, des opinions ou des perspectives essentielles à la réalisation des travaux. Les membres offrent aussi de la rétroaction à différentes étapes du projet.

À cette fin, le comité devra notamment :

- se prononcer sur les questions clés de recherche puis les critères d'inclusion et d'exclusion;
- prendre connaissance des résultats de la revue de littérature de l'INESSS;
- fournir de l'information contextuelle et expérientielle;
- contribuer à l'identification des enjeux d'implantation des recommandations pour l'ensemble des acteurs impliqués;
- contribuer à la formulation des recommandations finales.

ANNEXE G

Commentaires des lecteurs externes

Tableau G-1 Traitement des commentaires des lecteurs externes

Commentaires des lecteurs externes	Réponses de l'équipe de projet
Lecteur #1 : D^{re} Josée Brossard, hémato-oncologue pédiatrique	
Qualité scientifique du rapport : 9/10 (Méthodologie des travaux rigoureuse et impeccable. Limites = peu de données probantes/recommandations basées sur consensus d'experts)	
1. Contenu général :	
1.1. Les informations dans le protocole médical national (PMN) sont-elles bien présentées et faciles à lire ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.2. La méthodologie vous semble-t-elle appropriée pour l'élaboration d'un PMN (voir rapport en soutien)? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.3. Le contenu du PMN est-il applicable dans le contexte québécois actuel ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.4. Les éléments de réflexion menant au contenu du PMN et l'ordonnance collective (OC) sont-ils tous présents (voir rapport en soutien) ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.5. Le contenu du PMN est-il accessible pour un lecteur non spécialiste ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.6. Les références sont-elles d'actualité ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.7. Dans le contexte d'une OC appliquée au Québec par des professionnels autorisés est-ce que les contre-indications à l'application de l'OC par un professionnel ou une infirmière praticienne sont adéquates ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.8. Dans le contexte d'une OC appliquée au Québec par des professionnels autorisés est-ce que les limites ou situations exigeant une consultation obligatoire avec	Aucune modification n'est nécessaire à la suite des commentaires de cette section.

Commentaires des lecteurs externes	Réponses de l'équipe de projet
une infirmière praticienne spécialisée ou un médecin sont adéquates ? <i>Oui</i>	
2. Contenu spécifique : Vous êtes invité(e) à commenter plus en détail les sections du PMN et de l'OC pour lesquelles vous avez une expertise particulière	
Commentaires sur les distinctions à apporter pour la clientèle pédiatrique et les précautions particulières et les contre-indications spécifiques à cette clientèle sont judicieuses	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
3. Transfert des connaissances : Vos réponses serviront à développer notre stratégie de transfert des connaissances à la suite de la publication du PMN et de l'OC.	
• Médecins de famille/GMF • Équipes des CLSC • Hémato-oncologues adultes et pédiatriques plus les infirmières • Radio-oncologues adultes et pédiatriques plus les infirmières • Pharmaciens d'hôpitaux et communautaires	Ces informations seront prises en considération lors de la diffusion et des activités de transfert de connaissances.
Lecteur #2 : D^r Marc-André Brassard, radio-oncologue	
Qualité scientifique du rapport : 10/10	
1. Contenu général :	
1.1 Les informations dans le protocole médical national (PMN) sont-elles bien présentées et faciles à lire ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.2 La méthodologie vous semble-t-elle appropriée pour l'élaboration d'un PMN (voir rapport en soutien)? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.3 Le contenu du PMN est-il applicable dans le contexte québécois actuel ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.4 Les éléments de réflexion menant au contenu du PMN et l'ordonnance collective (OC) sont-ils tous présents (voir rapport en soutien) ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.5 Le contenu du PMN est-il accessible pour un lecteur non spécialiste ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.6 Les références sont-elles d'actualité ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.7 Dans le contexte d'une OC appliquée au	La proposition « Peut être avalé sur

Commentaires des lecteurs externes	Réponses de l'équipe de projet
Québec par des professionnels autorisés est-ce que les contre-indications à l'application de l'OC par un professionnel ou une infirmière praticienne sont adéquates ? <i>NON. Personnellement, j'utilise assez fréquemment le rince-bouche avec lidocaïne chez la clientèle avec cancer ORL avec succès. Par contre, il ne faut pas nuire à la déglutition ni provoquer d'aspiration. Mon avis serait de retirer cette contre-indication, mais ne pas permettre d'avaler. « Peut-être avalé sur recommandation de l'équipe soignante en oncologie, sauf chez les personnes de moins de 14 ans ET chez les patients avec cancer ORL »</i>	recommandation de l'équipe soignante en oncologie, sauf chez les personnes de moins de 14 ans ET chez les patients avec cancer ORL » a été ajoutée dans le PMN. De plus, à la suite d'une discussion avec le radio-oncologue membre du comité consultatif, l'ajout suivant sera inclus dans le PMN pour l'usage du rince-bouche oncologique avec lidocaïne : « Dans le cas d'un cancer ORL, ce traitement est réservé à l'usage d'un prescripteur autorisé ». Cette formulation permet aux médecins de prescrire le rince-bouche pour les cancers ORL, mais ne permet pas aux autres professionnels de la santé de le faire. Une contre-indication a également été ajoutée à l'OC.
1.8 Dans le contexte d'une OC appliquée au Québec par des professionnels autorisés est-ce que les limites ou situations exigeant une consultation obligatoire avec une infirmière praticienne spécialisée ou un médecin sont adéquates ? <i>Oui</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
2. Contenu spécifique : Vous êtes invité(e) à commenter plus en détail les sections du PMN et de l'OC pour lesquelles vous avez une expertise particulière	
AU point INFORMATION À TRANSMETTRE, section Alimentation : Je recommanderais un suivi en nutrition clinique si possible. À mon avis, il s'agit d'un apport extrêmement important et utile au travail d'équipe pour cette clientèle fragile dont l'état général peut basculer rapidement. Sans avoir de preuve scientifique à soumettre, mon expérience démontre qu'un suivi serré avec un professionnel de la nutrition permet d'éviter ou de dépister rapidement une trop grande détérioration.	Ce point a été discuté avec les membres du comité consultatif. La majorité des membres ont mentionné que les personnes atteintes d'un cancer ont presque toujours une consultation avec une nutritionniste avant le début des traitements antinéoplasiques. Si ce n'était pas le cas, l'utilisation dans le PMN de la phrase « Optimiser avec l'équipe soignante en oncologie la prise en charge des facteurs de risque modifiables qui favorisent le développement de la mucosite oropharyngée, si requis » serait suffisante et sous-entend une consultation en nutrition si requise.
3. Transfert des connaissances : Vos réponses serviront à développer notre stratégie de transfert des connaissances à la suite de la publication du PMN et de l'OC	
• <i>Radio-oncologues</i> • <i>ORL</i> • <i>Hémato-oncologues</i> • <i>Médecins de famille</i> • <i>Pédiatres</i> • <i>Dentistes impliqués en oncologie</i> • <i>Infirmières pivots en oncologie, infirmières cliniciennes en oncologie</i> • <i>Pharmaciens en oncologie</i> • <i>Nutritionnistes</i> • <i>Technologues en radio-oncologie</i>	Ces informations seront prises en considération lors de la diffusion et des activités de transfert de connaissances.

Commentaires des lecteurs externes	Réponses de l'équipe de projet
Lecteur #3 : Dr Nicolas Marcoux, hémato-oncologue	
Qualité scientifique du rapport : 10/10	
1. Contenu général :	
1.1 Les informations dans le protocole médical national (PMN) sont-elles bien présentées et faciles à lire ? <i>Oui. Tous les éléments importants du rapport en soutien sont présents. Je ne suis pas familier avec le degré de risque réel de l'hydroxyde de magnésium/aluminium chez les patients avec insuffisance rénale lorsqu'il est pris à la dose maximale permise dans le protocole. Si celui-ci est le moins significatif il pourrait être utile d'ajouter insuffisance rénale à la section 1.3 (histoire de santé), car pourrait passer inaperçu dans le tableau assez chargé (mais très pertinent) de la section 2.2</i>	L'ajout d'une section dans l'histoire de santé a été effectué pour mettre l'emphasis sur les deux antécédents pour lesquels une précaution particulière doit être portée. Se renseigner sur la présence d'un des antécédents suivants (voir les précautions à la section 2.2) : ▶ Insuffisance rénale ▶ Bradycardie ou altération de la fonction cardiovasculaire
1.2 La méthodologie vous semble-t-elle appropriée pour l'élaboration d'un PMN (voir rapport en soutien)? <i>Oui. Le processus et les outils d'évaluation utilisés semblent robustes et les documents consultés semblent tous pertinents et bien conçus.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.3 Le contenu du PMN est-il applicable dans le contexte québécois actuel ? <i>Oui. En particulier, la prise en compte de la couverture des divers éléments du rince-bouche par le régime d'assurance publique est un point fort de cette démarche afin de limiter les barrières financières qui sont parfois présentes sans que les cliniciens soient au courant.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.4 Les éléments de réflexion menant au contenu du PMN et l'ordonnance collective (OC) sont-ils tous présents (voir rapport en soutien) ? <i>Oui. Le rapport me semble complet à ce niveau. Il s'agit d'un sujet à la fois simple, mais complexe vu la nature imparfaite des données qui supportent la conduite choisie. Compte tenu de ceci, je trouve que la démarche qui a mené au choix final de rince-bouche est bien décrite et logique.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.

Commentaires des lecteurs externes	Réponses de l'équipe de projet
1.5 Le contenu du PMN est-il accessible pour un lecteur non spécialiste ? <i>Le document se lit très bien. Le rôle des diverses composantes des rince-bouches proposés est bien expliqué. Aucune section ne me semble inutilement technique.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.6 Les références sont-elles d'actualité ? <i>Oui. J'ai été agréablement surpris pour un sujet où on ne s'attend pas à des avancées scientifiques majeures à intervalle régulier du fait que la vaste majorité des références dataient de moins de 10 ans. Ceci est particulièrement notable pour les documents canadiens retenus, majoritairement produits dans les 5 dernières années.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.7 Dans le contexte d'une OC appliquée au Québec par des professionnels autorisés est-ce que les contre-indications à l'application de l'OC par un professionnel ou une infirmière praticienne sont adéquates ? <i>Oui. Je n'aurais rien à ajouter à cette section.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.8 Dans le contexte d'une OC appliquée au Québec par des professionnels autorisés est-ce que les limites ou situations exigeant une consultation obligatoire avec une infirmière praticienne spécialisée ou un médecin sont adéquates ? <i>Je suis d'accord avec les limites et indications de réévaluation indiquées. Dans mon expérience, certains patients ne présentent pas d'amélioration après 48 h de traitement sans non plus se détériorer et ceci n'est pas nécessairement inquiétant. Cependant, il est préférable d'être prudent et d'obtenir un diagnostic formel de mucosite par un médecin ou une IPS dans ces situations, ce que le PMN exige à juste titre.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
2. Contenu spécifique : Vous êtes invité(e) à commenter plus en détail les sections du PMN et de l'OC pour lesquelles vous avez une expertise particulière	
La mucosite secondaire aux traitements antinéoplasiques est une problématique très fréquente en clinique. Les rince-bouches oncologiques sont par le fait même une des thérapies de support que je prescris le plus souvent. Les auteurs du rapport en soutien	Aucune modification n'est nécessaire à la suite des commentaires de cette section.

Commentaires des lecteurs externes	Réponses de l'équipe de projet
ont correctement identifié la grande variabilité de composition des rince-bouches oncologiques à travers la province, sans qu'une telle variété soit réellement justifiée d'un point de vue médical. Le document est d'excellente qualité et utilise des références fiables et dans plusieurs cas connues et utilisées par les cliniciens. Le PMN lui-même est bien rédigé et je n'ai pas noté d'élément majeur posant problème. Je serais très à l'aise si le document était présenté tel quel. Une des qualités notables du document est de viser à faciliter l'accès à cette thérapie en permettant une prescription plus facile tout en étant encadrée, sécuritaire et en évitant des barrières financières inutiles et parfois non suspectées par le clinicien.	
Bien que je ne sois pas certain que le protocole puisse avoir un impact mesurable sur les hospitalisations secondaires aux mucosites, il est probable qu'une utilisation optimale de cette thérapie de support permette dans certains cas de maintenir une meilleure dose-intensité de la thérapie antinéoplasique. Avant tout, la qualité de vie des patients aurait le potentiel d'être améliorée, les symptômes de mucosite étant fréquemment rapportés par les patients lors de leurs rendez-vous. Ces deux derniers éléments étant difficiles à mesurer systématiquement, il ne faudrait pas qu'une éventuelle non-réduction des hospitalisations soit perçue comme un manque d'utilité du protocole proposé.	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
Bien qu'il ne s'agisse pas d'un aspect majeur ayant un impact sur le PMN, la mention que l'historique d'herpès est évalué systématiquement en amont du traitement antinéoplasique n'est pas exacte à l'exception de certaines néoplasies hématologiques ou processus de greffe. Dans la plupart des cas, aucune mention au dossier médical n'est présente quant au statut sérologique HSV. Je ne pense pas cependant que ceci influence la capacité des cliniciens d'identifier une cause virale potentielle.	Ce point a été soulevé pendant l'élaboration du PMN par les membres du comité consultatif. L'aspect des ulcérations causées par le virus de l'herpès est très difficilement différenciable de ceux causés par la mucosite. De plus, selon les modalités du suivi, si aucune amélioration n'est observée, la personne doit revenir pour une réévaluation ou une investigation supplémentaire ce qui pourrait inclure un test de dépistage de l'herpès (selon le jugement clinique). Donc, même s'il est fait mention ou non de la présence d'un diagnostic précédent d'herpès, le PMN serait initié. Dans le rapport en soutien, l'information a été changée pour « l'historique d'herpès des personnes sous traitement antinéoplasique est souvent évalué en amont du traitement, principalement pour certaines néoplasies hématologiques ou processus de greffe ».

Commentaires des lecteurs externes	Réponses de l'équipe de projet
Bien qu'encore une fois ceci n'influence pas le PMN, énormément de patients utilisent en première intention une solution de bicarbonate de sodium « faite maison ». Ceci est même recommandé par certains pharmaciens et infirmières sur les unités d'oncologie. Bien qu'il soit fait mention du club soda dans le tableau 4, il aurait pu être intéressant d'inclure dans le document un commentaire sur l'efficacité/absence d'efficacité de cette solution.	L'utilisation d'un rince-bouche contenant du bicarbonate et du sel est souvent recommandée par les groupes en oncologie et il était également présent dans les guides de pratique clinique retenus. Cependant, puisque ce n'est pas un traitement pharmacologique, qu'une évaluation de son efficacité comparative n'a pu être effectuée lors de l'élaboration de ce PMN, et que ce rince-bouche serait principalement utilisé en amont de l'amorce du PMN (dans le cadre de directives données par l'équipe de soins en oncologie), aucune recommandation sur son utilisation ne sera incluse dans le rapport en soutien ou le PMN.
3. Transfert des connaissances : Vos réponses serviront à développer notre stratégie de transfert des connaissances à la suite de la publication du PMN et de l'OC.	
Je crois que le document est pertinent pour les médecins impliqués dans le suivi des patients sous traitement pour un cancer, y compris les médecins de famille qui peuvent être appelés à gérer ces effets secondaires dans certains milieux. Évidemment, le PMN est également pertinent pour les pharmaciens d'officine et d'oncologie, dentistes de même que les IPS et autres professionnels autorisés à le prescrire. Le document pourrait être lu par certains patients ou proches aidants ayant un intérêt particulier, mais la section « information à transmettre » du PMN résume l'essentiel de ce qui est pertinent pour la majorité des patients. Tel que mentionné dans le document, l'exercice qui a été fait ici vise à maximiser l'accès des patients à ce soin de support et potentiellement à diminuer les impacts de la mucosite haute (baisse de l'intensité thérapeutiques, hospitalisations, etc.). Je n'entrevois pas d'impact budgétaire majeur ou d'autre facteur qui pourrait intéresser les décideurs en particulier.	Ces informations seront prises en considération lors de la diffusion et des activités de transfert de connaissances.
Lecteur #4 : Mme Christine Noël, pharmacienne d'établissement	
Qualité scientifique du rapport : 10/10	
1. Contenu général :	
1.1 Les informations dans le protocole médical national (PMN) sont-elles bien présentées et faciles à lire ? <i>Les informations sont bien présentées et de façon claire et logique.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.2 La méthodologie vous semble-t-elle appropriée pour l'élaboration d'un PMN (voir rapport en soutien)?	Aucune modification n'est nécessaire à la suite des commentaires de cette section.

Commentaires des lecteurs externes	Réponses de l'équipe de projet
<i>À mon avis, les questions d'évaluation de la méthodologie sont toutes pertinentes et couvrent le sujet de façon globale et précise à la fois. Je suis aussi d'avis que la stratégie de recherche est rigoureuse et variée. Tous les aspects ont été couverts par cette recherche (lois, guides destinés aux différents professionnels concernés, revue de la littérature concernant directement le sujet, etc.). La composition du groupe d'experts consultés pour monter le PMN représente bien l'interdisciplinarité nécessaire à la gestion de la mucosité.</i>	
1.3 Le contenu du PMN est-il applicable dans le contexte québécois actuel ? <i>Tout à fait applicable.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.4 Les éléments de réflexion menant au contenu du PMN et l'ordonnance collective (OC) sont-ils tous présents (voir rapport en soutien) ? <i>Tout à fait. On y tient compte de tous les aspects : traitement, suivi, prévention d'autres épisodes, informations complètes nécessaires aux professionnels de la santé qui sortent légèrement de leur cadre habituel de pratique, aspects légaux, etc.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.5 Le contenu du PMN est-il accessible pour un lecteur non spécialiste ? <i>Absolument.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.6 Les références sont-elles d'actualité ? <i>Je suis d'avis que les références consultées sont toujours valides aujourd'hui.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.7 Dans le contexte d'une OC appliquée au Québec par des professionnels autorisés est-ce que les contre-indications à l'application de l'OC par un professionnel ou une infirmière praticienne sont adéquates ? <i>Les contre-indications sont adéquates et bien expliquées.</i>	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
1.8 Dans le contexte d'une OC appliquée au Québec par des professionnels autorisés est-ce que les limites ou situations exigeant une consultation obligatoire avec une infirmière praticienne spécialisée ou un médecin sont adéquates ?	Aucune modification n'est nécessaire à la suite des commentaires de cette section.

Commentaires des lecteurs externes	Réponses de l'équipe de projet
<i>Les limites et les situations qui exigent une consultation, mentionnées dans le document correspondent en effet à la pratique actuelle.</i>	
2. Contenu spécifique : Vous êtes invité(e) à commenter plus en détail les sections du PMN et de l'OC pour lesquelles vous avez une expertise particulière	
Dans la perspective que le pharmacien peut maintenant initier la thérapie, il est apprécié que la présentation clinique (signes et symptômes, diagnostic différentiel) soit bien exposée dans le PMN et bien expliquée dans le rapport en soutien. Excellente présentation des principes actifs contenus dans les rince-bouches ainsi que des détails des recettes dans un tableau : l'information y est bien résumée et facile d'accès (rapide, efficace).	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
Il serait souhaitable d'ajouter au bas du premier tableau, si possible, une référence à consulter par le pharmacien communautaire dans les cas de rupture d'inventaire d'un produit autre que la lidocaïne, pour éviter les problèmes de couverture par le RPAM.	Les formats de médicaments remboursés par le RPAM sont inclus dans le tableau de la section 2.2. Une note a été ajoutée en bas de tableau pour spécifier que les produits injectables ne sont pas remboursés par le RPAM lorsqu'utilisés dans des préparations magistrales. « Les solutions injectables ne sont pas remboursées par le RPAM lorsqu'utilisées pour des préparations magistrales » Une référence vers d'autres produits de remplacement serait vite obsolète puisque les fournisseurs peuvent changer avec le temps.
La présence de mesures non pharmacologiques pour le traitement et la prévention de la mucosite oropharyngée est pertinente.	Aucune modification n'est nécessaire à la suite des commentaires de cette section.
Il serait très intéressant et certainement fortement apprécié par les professionnels de la santé et les patients que les informations contenues dans la section 5 (informations à transmettre) soient utilisées pour monter un feuillet d'information au patient. Ce feuillet pourrait être ajouté en annexe à ce document.	Un feuillet d'information qui pourra être remis à la personne qui consulte par le professionnel de la santé et qui contient les informations de la section 5, la posologie et les recommandations de suivi a été élaboré et sera annexé au PMN.
Je me permets de vous suggérer de vérifier si la scopolamine transdermique peut être mentionnée en exemple en 2.2.3.3, car je crois que ce produit est retiré du marché.	La scopolamine a été retirée de l'exemple mentionné.

Commentaires des lecteurs externes	Réponses de l'équipe de projet
3. Transfert des connaissances : Vos réponses serviront à développer notre stratégie de transfert des connaissances à la suite de la publication du PMN et de l'OC.	
Les membres de l'équipe en oncologie : médecins, infirmière, IPO, IPS, pharmacien; les patients et leurs proches aidants, les pharmaciens communautaires. Évidemment le personnel décideur du RPAM ainsi que celui des régimes d'assurance privée.	Ces informations seront prises en considération lors de la diffusion et des activités de transfert de connaissances.

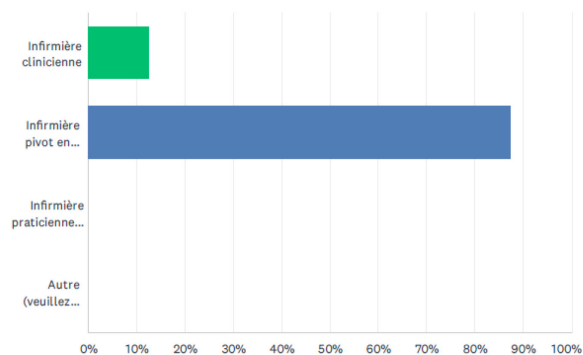
ANNEXE H

Résultats du sondage auprès de futurs utilisateurs du PMN, de l'OC et de la feuille de suivi

PMN et OC – Traitement pharmacologique de la mucosite oropharyngée chez une personne recevant un traitement antinéoplasique

Q1 Quelle est votre profession ?

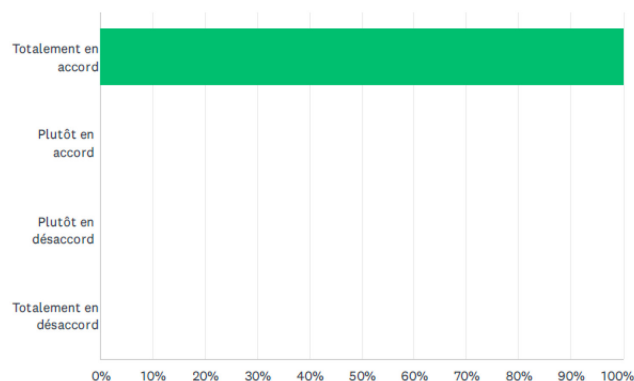
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Infirmière clinicienne	12.50% 1
Infirmière pivot en oncologie	87.50% 7
Infirmière praticienne spécialisée	0.00% 0
Autre (veuillez préciser) :	0.00% 0
TOTAL	8

Q3 Le contenu du protocole médical national (PMN) sur le traitement pharmacologique de la mucosite oropharyngée chez l'enfant et l'adulte est pertinent à ma pratique (adapté à la réalité et aux besoins du terrain) :

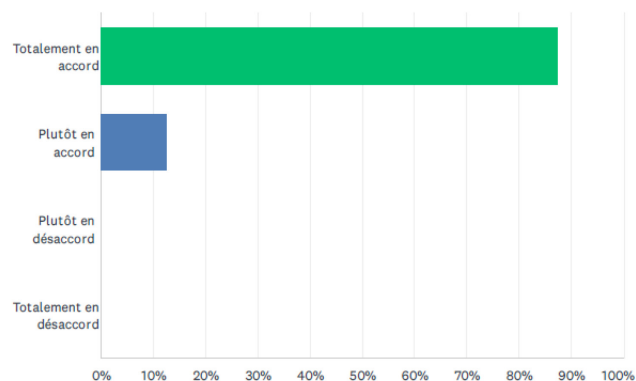
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalement en accord	100.00% 8
Plutôt en accord	0.00% 0
Plutôt en désaccord	0.00% 0
Totalement en désaccord	0.00% 0
TOTAL	8

Q4 Le PMN présente les informations de façon claire et facile à comprendre :

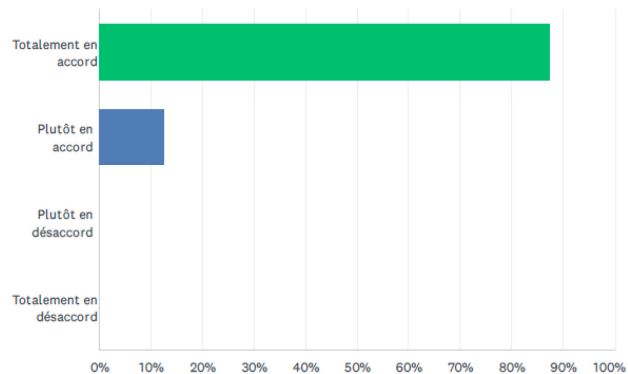
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalement en accord	87.50% 7
Plutôt en accord	12.50% 1
Plutôt en désaccord	0.00% 0
Totalement en désaccord	0.00% 0
TOTAL	8

Q5 L'application des directives contenues dans le PMN ne devrait pas poser de difficulté particulière dans mon milieu de pratique:

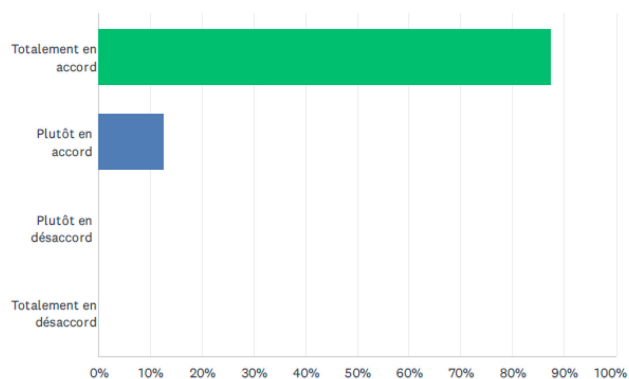
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES	
Totalement en accord	87.50%	7
Plutôt en accord	12.50%	1
Plutôt en désaccord	0.00%	0
Totalement en désaccord	0.00%	0
TOTAL		8

Q6 La description de la situation clinique du PMN est claire, appropriée à la réalité du terrain et permet facilement de déterminer l'applicabilité du protocole à la personne qui consulte :

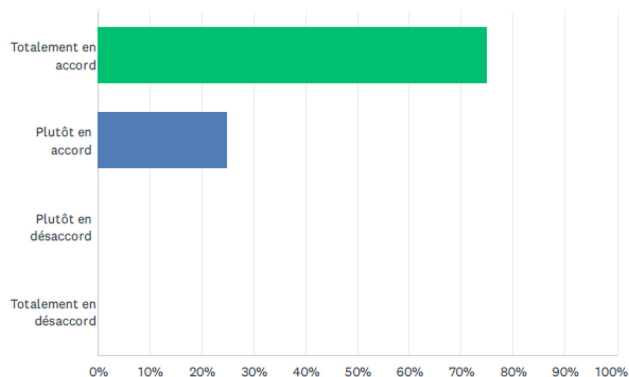
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES	
Totalement en accord	87.50%	7
Plutôt en accord	12.50%	1
Plutôt en désaccord	0.00%	0
Totalement en désaccord	0.00%	0
TOTAL		8

Q7 Les contre-indications à l'application du PMN sont précises et permettent de bien cibler les situations qui ne sont pas couvertes par le PMN :

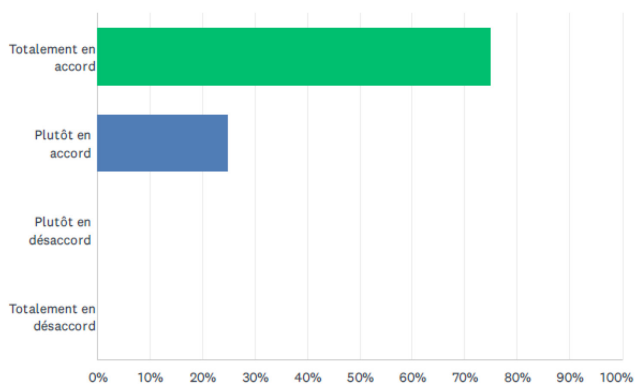
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES	
Totalement en accord	75.00%	6
Plutôt en accord	25.00%	2
Plutôt en désaccord	0.00%	0
Totalement en désaccord	0.00%	0
TOTAL		8

Q8 La présentation des options de traitement pharmacologique (tableau de la section 2.3) est claire et facilement applicable dans ma pratique:

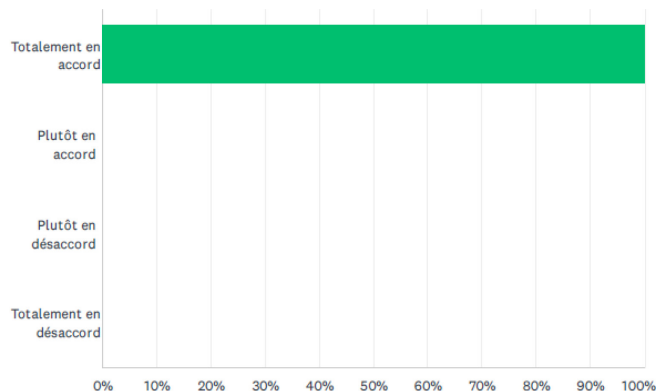
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES	
Totalement en accord	75.00%	6
Plutôt en accord	25.00%	2
Plutôt en désaccord	0.00%	0
Totalement en désaccord	0.00%	0
TOTAL		8

Q9 Il ne manque pas d'information importante à ce PMN :

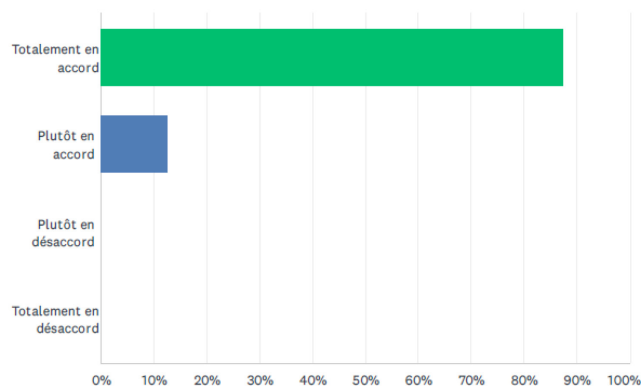
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalelement en accord	100.00% 8
Plutôt en accord	0.00% 0
Plutôt en désaccord	0.00% 0
Totalelement en désaccord	0.00% 0
TOTAL	8

Q10 Le contenu du modèle d'ordonnance collective (OC) sur le traitement pharmacologique de la mucosite oropharyngée chez l'enfant et l'adulte est pertinent à ma pratique (adapté à la réalité et aux besoins du terrain) :

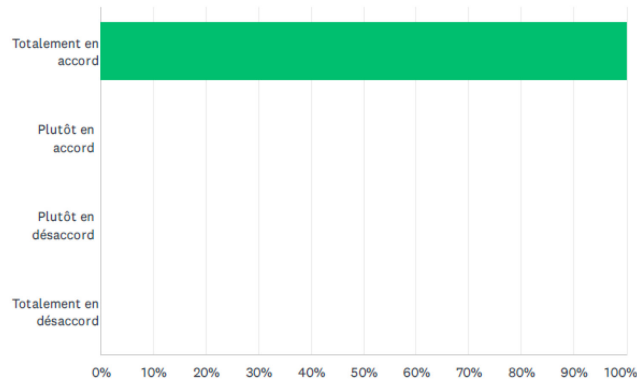
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalelement en accord	87.50% 7
Plutôt en accord	12.50% 1
Plutôt en désaccord	0.00% 0
Totalelement en désaccord	0.00% 0
TOTAL	8

Q11 Le modèle d'OC présente les informations de façon claire et facile à comprendre :

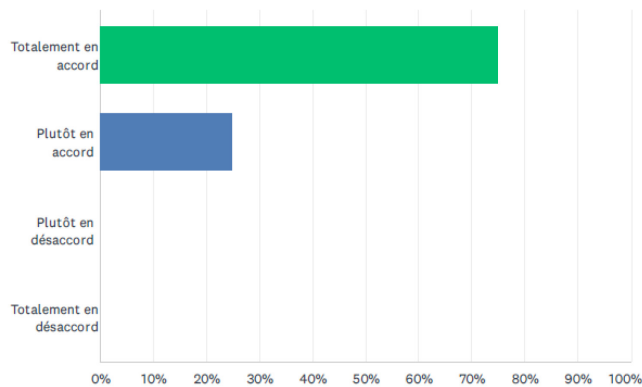
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalement en accord	100.00% 8
Plutôt en accord	0.00% 0
Plutôt en désaccord	0.00% 0
Totalement en désaccord	0.00% 0
TOTAL	8

Q12 Dans le modèle d'OC, les limites ou situations pour lesquelles une consultation avec un prescripteur autorisé est obligatoire sont claires pour moi :

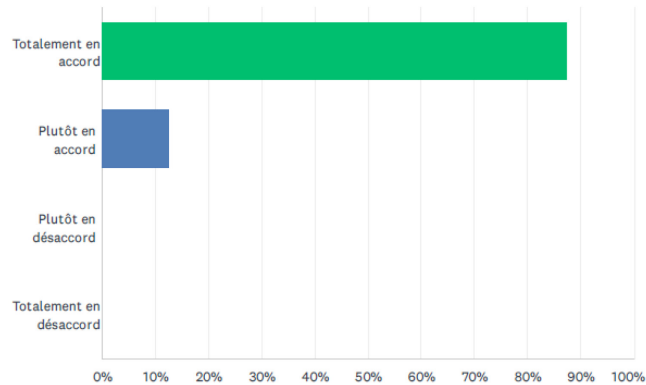
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalement en accord	75.00% 6
Plutôt en accord	25.00% 2
Plutôt en désaccord	0.00% 0
Totalement en désaccord	0.00% 0
TOTAL	8

Q13 Il ne manque pas d'information importante dans ce modèle d'OC :

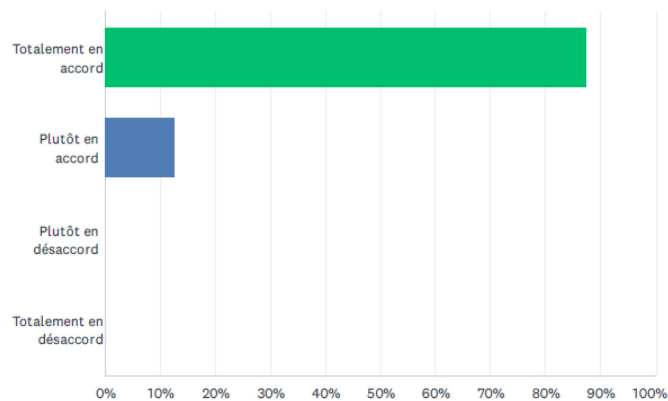
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalement en accord	87.50% 7
Plutôt en accord	12.50% 1
Plutôt en désaccord	0.00% 0
Totalement en désaccord	0.00% 0
TOTAL	8

Q14 La feuille de suivi est pertinente pour aider le professionnel de la santé à transmettre à la personne traitée l'information nécessaire au suivi de sa mucosite oropharyngée :

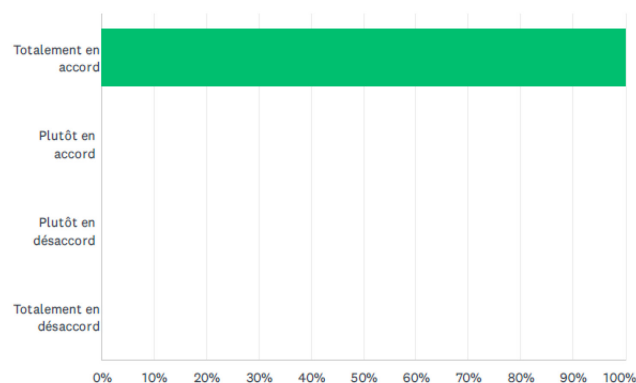
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalement en accord	87.50% 7
Plutôt en accord	12.50% 1
Plutôt en désaccord	0.00% 0
Totalement en désaccord	0.00% 0
TOTAL	8

Q15 La feuille de suivi présente l'information de façon claire et facile à comprendre :

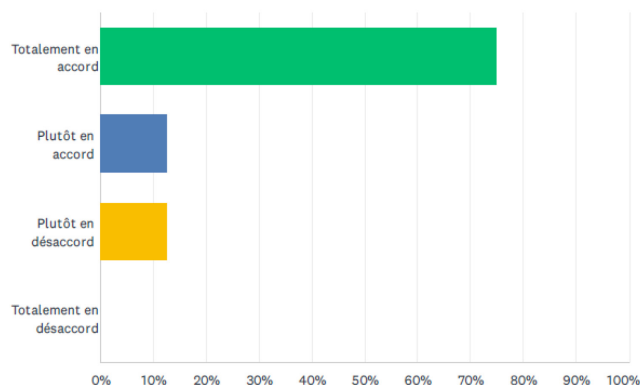
Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalelement en accord	100.00% 8
Plutôt en accord	0.00% 0
Plutôt en désaccord	0.00% 0
Totalelement en désaccord	0.00% 0
TOTAL	8

Q16 Il ne manque pas d'information importante dans cette feuille de suivi :

Réponses obtenues : 8 Question(s) ignorée(s) : 0



CHOIX DE RÉPONSES	RÉPONSES
Totalelement en accord	75.00% 6
Plutôt en accord	12.50% 1
Plutôt en désaccord	12.50% 1
Totalelement en désaccord	0.00% 0
TOTAL	8

Tableau H-1 Traitement des commentaires des futurs utilisateurs potentiels du protocole médical national, du modèle d'ordonnance collective et de la feuille de suivi

Question du sondage	Commentaires reçus	Réponses de l'INESSS
Q3. Le contenu du protocole médical national (PMN) portant sur l'initiation d'un traitement pharmacologique de la mucosite oropharyngée chez l'enfant et l'adulte est pertinent à ma pratique (adapté à la réalité et aux besoins du terrain) :	Aucun commentaire	Aucune action requise
Q4. Le PMN présente les informations de façon claire et facile à comprendre.	Dans la partie contre-indications à l'application de ce protocole, il est inscrit « ulcères confluents ». Je modifierais le terme confluent, j'ai dû effectuer des recherches pour savoir ce que cela signifie. J'imagine que je ne suis pas la seule.	Le terme « qui se touchent » a été ajouté au PMN et à l'OC pour plus de spécificité.
Q5 L'application des directives contenues dans le PMN ne devrait pas poser de difficulté particulière dans mon milieu de pratique :	Rince-bouche avec recette du CHU Sainte-Justine vs volet pédiatrique	Aucune action requise
	Ceci rend la pratique infirmière plus autonome pour la gestion de la mucosite oropharyngée	Aucune action requise
Q6 La description de la situation clinique du PMN est claire, appropriée à la réalité du terrain et permet facilement de déterminer l'applicabilité du protocole à la personne qui consulte :	Traitement antinéoplasique : (je spécifierais radiothérapie et chimiothérapie)	Une note de bas de page a été ajoutée qui indique : Dans tout le document, le terme « traitement antinéoplasique » réfère à tout traitement utilisé contre le cancer (p. ex. chimiothérapie, radiothérapie, thérapie ciblée).
Q7 Les contre-indications à l'application du PMN sont précises et permettent de bien cibler les situations qui ne sont pas couvertes par le PMN :	Ulcères confluents (terme « confluents » qui risque de ne pas être compris par tous les professionnels de la santé)	Une note de bas de page a été ajoutée qui indique : Dans tout le document, le terme « traitement antinéoplasique » réfère à tout traitement utilisé contre le cancer (p. ex. chimiothérapie, radiothérapie, thérapie ciblée).
Q8 La présentation des options de traitement pharmacologique (tableau de la section 2.3) est claire et facilement applicable dans ma pratique :	Aucun commentaire	Aucune action requise
Q9 Il ne manque pas d'information importante à ce PMN	Quand utiliser le gargarisme avec cortico vs avec lidocaïne	Dans le tableau 2.3, le rince-bouche oncologique avec corticostéroïde est utilisé en première intention. Pour celui avec lidocaïne, la phrase

Question du sondage	Commentaires reçus	Réponses de l'INESSS
		« Option de traitement alternative en présence de douleurs importantes » a été ajoutée pour plus de précision. Aucune échelle de gradation de la sévérité de la mucosite n'est utilisée dans le PMN à la demande des membres du comité consultatif puisque la douleur est spécifique à chaque individu.
Q10 Le contenu du modèle d'ordonnance collective (OC) portant sur l'initiation d'un traitement pharmacologique de la mucosite oropharyngée chez l'enfant et l'adulte est pertinent à ma pratique (adapté à la réalité et aux besoins du terrain)	Aucun commentaire	Aucune action requise
Q11 Le modèle d'OC présente les informations de façon claire et facile à comprendre	Aucun commentaire	Aucune action requise
Q12 Dans le modèle d'OC, les limites ou situations pour lesquelles une consultation avec un prescripteur autorisé est obligatoire sont claires pour moi	J'ajouterais des indications à quand le rince-bouche oncologique peut être avalé afin de rendre l'ordonnance collective plus complète	Dans le tableau 2.3 du PMN, il est indiqué que le rince-bouche oncologique avec corticostéroïdes peut être avalé ou recraché si lésions profondes. Pour celui avec la lidocaïne, la notion de lésions profondes a été ajoutée dans l'avertissement sous la posologie.
Q13 Il ne manque pas d'information importante dans ce modèle d'OC	Ajouter les indications permettant d'avalier les rince-bouches	Dans le tableau 2.3 du PMN, il est indiqué que le rince-bouche oncologique avec corticostéroïdes peut être avalé ou recraché si lésions profondes. Pour celui avec la lidocaïne, la notion de lésions profondes a été ajoutée dans l'avertissement sous la posologie.
Q14 La feuille de suivi est pertinente pour aider le professionnel de la santé à transmettre à la personne traitée l'information nécessaire au suivi de sa mucosite oropharyngée	Aucun commentaire	Aucune action requise
Q15 La feuille de suivi présente l'information de façon claire et facile à comprendre	Aucun commentaire	Aucune action requise
Q16 Il ne manque pas d'information importante dans cette feuille de suivi	Le suivi proposé n'est pas celui fait dans mon milieu « Planifier une consultation téléphonique, une téléconsultation ou une prise de rendez-vous dans les prochaines 24 h avec l'équipe soignante en oncologie » : Le suivi est dans les 48 h	Pour la feuille de suivi, la phrase « Planifier une consultation téléphonique, une téléconsultation ou une prise de rendez-vous dans les prochaines 24 h avec l'équipe soignante en oncologie » : a été retirée de la section « suivi », elle

Question du sondage	Commentaires reçus	Réponses de l'INESSS
	sauf si le client ne s'alimente pas : 24 h Informer votre équipe soignante en oncologie de l'initiation d'un traitement contre la mucosite oropharyngée. : ceci s'adresse au client? Je ne comprends pas l'attente.	n'aurait pas dû apparaître à cet endroit, elle se rapporte uniquement au PMN.
	L'onglet suivi. Est-il vraiment pertinent que la personne avise son équipe soignante de l'initiation d'un traitement contre la mucosite oropharyngée alors que la majorité, l'OC sera complétée un membre de l'équipe. De plus, dans la pratique, nous ne planifions pas de suivi 24 heures post utilisation pour chaque patient... je ne suis pas certaine de bien comprendre cet aspect.	Si le traitement est initié par un membre de l'équipe de soin en oncologie, il n'y a pas de problème, mais si le protocole est initié par exemple dans un CLSC, les membres du comité consultatif étaient tous en accord pour que la personne doive en informer son équipe soignante pour faciliter le suivi ou prévoir un ajustement des doses du traitement antinéoplasique. Pour la feuille de suivi, la phrase « Planifier une consultation téléphonique, une téléconsultation ou une prise de rendez-vous dans les prochaines 24 h avec l'équipe soignante en oncologie » : a été retirée de la section « suivi », elle n'aurait pas dû apparaître à cet endroit, elle se rapporte uniquement au PMN.
Q17 Avez-vous des commentaires ou des suggestions pour faciliter l'implantation et la diffusion du PMN, de l'OC et de la feuille de suivi dans votre milieu ?	Implanter l'outil via l'infirmière clinicienne de l'équipe afin qu'elle puisse donner l'enseignement nécessaire au reste de l'équipe. Il pourrait avoir quelques histoires de cas à titre de formation pour vérifier la bonne compréhension du personnel soignant.	L'information sera transmise à notre équipe en transferts des connaissances. Lors de la publication sur le site internet, un tutoriel contenant des cas cliniques sera également mis en ligne.
Q18 Avez-vous des commentaires supplémentaires sur la qualité, la clarté et la convivialité du PMN et du modèle d'OC pour le traitement pharmacologique de la mucosite oropharyngée chez l'adulte et l'enfant ?	Aucun commentaire	Aucune action requise

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