

2019/2020 MASCC/ISOO Clinical Practice Guidelines for the Management of Mucositis

Overall Summary

Developed by the Mucositis Study Group

Summary paper

MASCC/ISOO clinical practice guidelines for the management of mucositis secondary to cancer therapy

Citation

Elad S, Cheng KKF, Lalla RV, Yarom N, Hong C, Logan RM, Bowen J, Gibson R, Saunders DP, Zadik Y, Ariyawardana A, Correa ME, Ranna V, Bossi P; Mucositis Guidelines Leadership Group of the Multinational Association of Supportive Care in Cancer and International Society of Oral Oncology (MASCC/ISOO). *Cancer*. 2020 Oct 1;126(19):4423-4431.

Detailed publication

Antimicrobials, mucosal coating agents, anesthetics, and analgesics for the management of oral mucositis

Citation

Saunders DP, Rouleau T, Cheng K, Yarom N, Kandwal A, Joy J, Kayhan KB, van de Wetering M, Brito-Dellan N, Kataoka T, Chiang K, Ranna V, Vaddi A, Epstein J, Lalla RV, Bossi P, Elad S. Systematic review of antimicrobials, mucosal coating agents, anesthetics, and analgesics for

the management of oral mucositis in cancer patients and clinical practice guidelines. Support Care Cancer 28, 2473–2484 (2020).

Morphine (topical) — H&N cancer — RT-CT — treatment

- **Guideline category: Suggestion (LoE III)**
- **Guideline statement: Topical morphine 0.2% mouthwash is suggested for the treatment of OM-associated pain in H&N cancer patients treated with RT-CT.**

Sucralfate (combined topical and systemic administration) — H&N cancer — RT — prevention

- **Guideline category: Recommendation against (LoE II)**
- **Guideline statement: Sucralfate is not recommended for the prevention of OM-associated pain in H&N cancer patients treated with RT.**

Sucralfate (topical) — H&N cancer — RT — treatment

- **Guideline category: Recommendation against (LoE III)**
- **Guideline statement: Sucralfate is not recommended for the treatment of OM-associated pain in H&N cancer patients treated with RT.**

Sucralfate (combined topical and systemic) — solid cancer — CT — Treatment

- **Guideline: Recommendation against (LoE II)**
- **Guideline statement: Sucralfate is not recommended for the treatment of OM-associated pain in solid cancer patients treated with CT.**

Sucralfate (combined topical and systemic) — H&N cancer — CT — prevention

- **Guideline: No Guideline Possible**

Fluconazole (systemic) — H&N — RT/RT-CT — prevention

- **Guideline category: No Guideline Possible**

Miconazole (topical and systemic) — hematologic cancer — HSCT — prevention

- **Guideline category: No Guideline Possible**

Mucoadhesive hydrogel (topical) — H&N cancer—RT-CT — treatment

- **Guideline category: No Guideline Possible**

Polyvinylpyrrolidone (topical) — H&N cancer — RT-CT — treatment

Polyvinylpyrrolidone (topical) — H&N cancer — RT — treatment

Polyvinylpyrrolidone (topical) — hematologic patients — HSCT— treatment

- **Guideline category: No Guideline Possible**

Doxepin (topical) — H&N cancer patients — RT — treatment

- **Guideline category: No Guideline Possible**

Fentanyl — H&N cancer patients — RT or RT-CT — treatment

Fentanyl — Hematologic cancer patients — HSCT — treatment

- [Guideline category: No Guideline Possible](#)

Detailed publication

Anti-inflammatory agents for the management of oral mucositis

Citation

Ariyawardana A, Cheng KKF, Kandwal A, Tilly V, Al-Azri AR, Galiti D, Chiang K, Vaddi A, Ranna V, Nicolatou-Galitis O, Lalla RV, Bossi P, Elad S. Systematic review of anti-inflammatory agents for the management of oral mucositis in cancer patients and clinical practice guidelines. Support Care Cancer 27, 3985–3995 (2019).

Benzydamine mouthwash — H&N cancer — RT — prevention

- [Guideline category: Recommendation \(LoE I\)](#)
- [Guideline statement: Benzydamine mouthwash is recommended for the prevention of OM in patients with H&N cancer receiving a moderate dose RT \(< 50 Gy\).](#)

Benzydamine mouthwash — H&N cancer — RT-CT — prevention

- [Guideline category: Suggestion \(LoE II\)](#)
- [Guideline statement: Benzydamine mouthwash is suggested for the prevention of OM in patients with H&N cancer receiving RT and CT.](#)

Benzydamine mouthwash — H&N cancer — RT — treatment

- [Guideline category: No guideline possible](#)

Benzydamine mouthwash — H&N cancer — RT-CT — treatment

- [Guideline category: No guideline possible](#)

Benzydamine mouthwash — H&N cancer — CT — prevention

- [Guideline category: No guideline possible](#)

Benzydamine mouthwash — Hematologic malignancies and solid tumors — CT — prevention

- [Guideline category: No guideline possible](#)

Benzydamine mouthwash — Hematologic malignancies and solid tumors — CT — treatment

- [Guideline category: No guideline possible](#)

Benzydamine mouthwash — Hematologic malignancies — CT — prevention

- [Guideline category: No guideline possible](#)

Systemic celecoxib — H&N cancer — CT and RT — prevention

- [Guideline: No guideline possible \(LoE II\)](#)

Systemic irsogladine maleate — H&N cancer — CT — prevention

- **Guideline:** No guideline possible

Misoprostol — Hematologic and solid cancer — CT — prevention

- **Guideline:** No guideline possible (LoE III)

Misoprostol — H&N cancer — RT — prevention

- **Guideline:** No guideline possible (LoE III)

Misoprostol — H&N cancer — RT-CT — prevention

- **Guideline:** No guideline possible (LoE III)

Rebamipide — H&N cancer — RT-CT — prevention

- **Guideline:** No guideline possible

Detailed publication

Basic oral care for the management of oral mucositis

Citation

Hong CHL, Gueiros LA, Fulton JS, Cheng KKF, Kandwal A, Galiti D, Fall-Dickson JM, Johansen J, Ameringer S, Kataoka T, Weikel D, Eilers J, Ranna V, Vaddi A, Lalla RV, Bossi P, Elad S. Systematic review of basic oral care for the management of oral mucositis in cancer patients and clinical practice guidelines. Support Care Cancer 27, 3949–3967 (2019).

Professional Oral Care

- **Guideline category:** No Guideline Possible/Expert panel consensus in favor (LoE III).
- **Guideline statement:** No guideline was possible regarding the use of professional oral care for the prevention of OM for patients with hematologic, solid or H&N cancers due to limited and inconsistent data.
An expert opinion complements this 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 prior to cancer therapy is desirable to reduce the patient's risk for local and systemic infections from odontogenic sources.

Multi-agent combination oral care protocols

- **Guideline category:** Suggestion (LoE III).
- **Guideline statement:**

The panel suggests that implementation of multi-agent combination oral care protocols is beneficial for the prevention of OM during CT. (LoE III)

The panel suggests that implementation of multi-agent combination oral care protocols is beneficial for the prevention of OM during H&N RT. (LoE III)

The panel suggests that implementation of multi-agent combination oral care protocols is beneficial for the prevention of OM during HSCT. (LoE III)

Patient education

- **Guideline category: No Guideline Possible/Expert panel consensus in favor (LoE III).**
- **Guideline statement: No guideline was possible regarding the use of patient education for the prevention of OM in hematologic cancer patients during HSCT or CT due to 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 as this may improve patient's self-management and adherence to the recommended oral care protocol during cancer treatment.

Bland mouth rinses

- **Guideline category: No Guideline Possible/Expert panel consensus in favor (LoE III).**
- **Guideline statement: 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 due to limited data for each intervention.**
An expert opinion complements this guideline. Despite the limited data available for both saline and sodium bicarbonate, the panel recognizes that these rinses are inert bland rinses that increase oral clearance which may be helpful for maintaining oral hygiene and improving patient comfort.

Chlorhexidine — H&N cancer — RT — prevention

- **Guideline category: Suggestion against (LoE III).**
- **Guideline statement: The panel suggests that CHX not be used in the prevention of OM in patients undergoing H&N RT.**

Chlorhexidine — other cancer patient population — prevention

- **Guideline category: No Guideline Possible (LoE III).**

Chlorhexidine — other cancer patient population — treatment

- **Guideline category: No Guideline Possible (LoE III).**

Detailed publication

Oral cryotherapy for the management of oral mucositis

Citation

Correa MEP, Cheng KKF, Karen Chiang, Kandwal A, Loprinzi CL, Mori T, Potting C, Rouleau T, Toro JJ, Ranna V, Vaddi A, Peterson DE, Bossi P, Lalla RV, Elad S. Systematic review of oral cryotherapy for the management of oral mucositis in cancer patients and clinical practice guidelines. Support Care Cancer 28, 2449–2456 (2020).

Cryotherapy — hematological cancer — HSCT — prevention

- **Guideline category: Recommendation (LoE II)**
- **Guideline statement: The panel recommends using oral cryotherapy to prevent oral mucositis in patients undergoing autologous HSCT when the conditioning includes high-dose melphalan.**

Cryotherapy — solid tumors — CT with bolus 5-FU — prevention

- **Guideline category: Recommendation (LoE II)**
- **Guideline statement: The panel recommends that patients receiving bolus 5-FU chemotherapy undergo 30 min of oral cryotherapy to prevent oral mucositis.**

Cryotherapy — solid tumors — CT with short-term infusion and short half-life agents — prevention

- **Guideline category: No guideline possible (LoE III)**

Cryotherapy — H&N cancer — RT — prevention

- **Guideline category: No guideline possible (LoE III)**

Cryotherapy — solid cancer — CT — treatment

- **Guideline category: No guideline possible (LoE III)**

Cryotherapy — solid cancer — AT with 5-FU (continuous) — prevention

- **Guideline category: No guideline possible (LoE III)**

Detailed publication

Growth factors and cytokines for the management of oral mucositis in cancer patients

Citation

Logan RM, Al-Azri AR, Bossi P, Stringer AM, Joy JK, Soga Y, Ranna V, Vaddi A, Raber-Durlacher JE, Lalla RV, Cheng KKF, Elad S. Systematic review of growth factors and cytokines for the management of oral mucositis in cancer patients and clinical practice guidelines. Support Care Cancer 28, 2485–2498 (2020).

KGF (IV) — Hematologic cancer — HSCT — prevention

- **Guideline: Recommendation (LoE I)**
- **Guideline statement: The use of KGF-1 intravenously is recommended for prevention of OM in patients with hematological cancer undergoing autologous HSCT with a conditioning regimen that includes high dose chemotherapy and TBI.**

KGF (IV) — Hematologic cancer — CT — prevention

- **Guideline: No guideline possible**

KGF (IV) — H&N cancers — RT-CT — prevention

- **Guideline: No guideline possible**

KGF (IV) — Solid cancers — CT — prevention

- **Guideline: No guideline possible**

GM-CSF (topical) — Solid/hematological cancer — HSCT — prevention

- **Guideline: Suggestion against topical use in HSCT (LoE II)**
- **Guideline statement: The evidence suggests that topical GM-CSF should not be used for the prevention of OM in patients undergoing HSCT.**

GM-CSF (SC) — H&N cancers — RT or RT-CT — prevention

- **Guideline: No guideline possible**

GM-CSF (SC) — H&N cancers — RT — treatment

GM-CSF (SC) — H&N cancers — CT — prevention

GM-CSF (SC) — H&N cancers — CT — treatment

GM-CSF (SC) — Hematological cancers — HSCT — prevention

GM-CSF (topical) — H&N cancers — RT — prevention

GM-CSF (topical) — H&N cancers — CT or RT-CT — prevention

GM-CSF (topical) — Hematological cancers — HSCT — treatment

GM-CSF (topical) — Breast cancer — CT — prevention

GM-CSF (topical) — Solid cancer — CT — treatment

- **Guideline: No guideline possible**

G-CSF subcutaneous (SC) — H&N cancers — CT — prevention

- **Guideline: No guideline possible**

G-CSF SC — Solid cancers — CT — prevention

- **Guideline: No guideline possible**

G-CSF (topical or systemic) — Hematological cancers — CT — prevention

- **Guideline: No guideline possible**

G-CSF (topical) — Solid cancers — CT — treatment

- **Guideline: No guideline possible**

rhEGF (topical) — Hematological cancers — HSCT — prevention

- **Guideline: No guideline possible**

rhEGF (topical) — H&N cancers — RT-CT — prevention

- **Guideline: No guideline possible**

rhEGF (topical) — Solid cancer — CT — prevention

- **Guideline:** No guideline possible

EPO (topical) — Hematological cancers — HSCT — prevention

- **Guideline:** No guideline possible

Detailed publication

Natural and miscellaneous agents for the management of oral mucositis — part 1: vitamins, minerals, and nutritional supplements

Citation

Yarom N, Hovan A, Bossi P, Ariyawardana A, Jensen SB, Gobbo M, Saca-Hazboun H, Kandwal A, Majorana A, Ottaviani G, Pentenero M, Nasr NM, Rouleau T, Lucas AS, Treister NS, Zur E, Ranna V, Vaddi A, Cheng KKF, Barasch A, Lalla RV, Elad S. 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. Support Care Cancer 27, 3997–4010 (2019).

Glutamine (parenteral) — HSCT — prevention

- **Guideline:** Recommendation against (LoE I)
- **Guideline statement:** Taking into account the lack of effectiveness in most studies as well as the potential risk, the panel recommends against the use of glutamine (parenteral) for the prevention of OM in patients undergoing HSCT.

Glutamine (PO) — H&N cancer, RT-CT — prevention

- **Guideline:** Suggestion (LoE II)
- **Guideline statement:** The panel suggests glutamine (per os) for the prevention of OM in patients with H&N cancer receiving RT-CT. The suggestion is with caution due to the higher mortality rate seen in HSCT patients treated with parenteral glutamine.

Glutamine (PO) — HSCT—prevention

- **Guideline:** No guideline possible (LoE III)

Glutamine (topical) — H&N cancer, RT—prevention

- **Guideline:** No guideline possible (LoE III)

Glutamine (parenteral) — Hematologic malignancies, CT — prevention

- **Guideline:** No guideline possible (LoE III)

Glutamine (PO) — Solid cancers, CT— prevention

- Guideline: No guideline possible (LoE II)

Zinc (systemic) — H&N cancer — RT/RT-CT — prevention

- Guideline: No guideline possible (LoE I)

Zinc (systemic) — HSCT — prevention

- Guideline: No guideline possible (LoE II)

Zinc (systemic) — Hematologic and solid cancers — CT — prevention

- Guideline: No guideline possible (LoE III)

Zinc (topical) — Hematologic patients — CT — prevention

- Guideline: No guideline possible (LoE III)

Supersaturated calcium phosphate rinse — HSCT — prevention

- Guideline: No guideline possible (LoE III)

Supersaturated calcium phosphate rinse — HSCT or CT — treatment

- Guideline: No guideline possible (LoE III)

Supersaturated calcium phosphate rinse — RT-CT — prevention

- Guideline: No guideline possible (LoE III)

Elemental diet (PO) — HSCT — prevention

- Guideline: No guideline possible (LoE IV)

Elemental diet (PO) — Solid cancers — CT — prevention

- Guideline: No guideline possible (LoE III)

Elemental diet (PO, swish and swallow) — H&N cancer — RT/RT-CT — prevention

- Guideline: No guideline possible (LoE IV)

Vitamin E (PO, swish and swallow) — Hematologic patients — CT — treatment

- Guideline: No guideline possible (LoE III)

Vitamin E (topical) — Solid cancer — CT — treatment

- Guideline: No guideline possible (LoE III)

Vitamin E (topical) — Solid cancers — CT — prevention

- Guideline: No guideline possible (LoE III)

Vitamin E (swish and swallow) — H&N cancer — RT — prevention

- Guideline: No guideline possible (LoE II)

Selenium (PO) — HSCT — prevention

- Guideline: No guideline possible (LoE III)

Folinic acid (PO/topical) — HSCT — prevention

- Guideline: No guideline possible (LoE IV)

Calcitriol (PO) — HSCT — prevention

- Guideline: No guideline possible (LoE III)

Detailed publication

Natural and miscellaneous agents for the management of oral mucositis — part 2: honey, herbal compounds, saliva stimulants, probiotics, and miscellaneous agents

Citation

Yarom N, Hovan A, Bossi P, Ariyawardana A, Jensen SB, Gobbo M, Saca-Hazboun H, Kandwal A, Majorana A, Ottaviani G, Pentenero M, Nasr NM, Rouleau T, Lucas AS, Treister NS, Zur E, Ranna V, Vaddi A, Barasch A, Lalla RV, Cheng KKF, Elad S. 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. Support Care Cancer 28, 2457–2472 (2020).

Chewing gum – hematologic/solid cancer (pediatric) – CT – prevention

- **Guideline: Suggestion against (LoE III)**
- **Guideline statement: Chewing gum is not suggested for the prevention of OM in pediatric patients with hematological or solid cancer treated with CT.**

Honey (combined topical-systemic) – H&N – RT or RT-CT – prevention

- **Guideline: Suggestion (LoE III)**
- **Guideline statement: Honey (combined topical application and systemic administration) is suggested for the prevention of OM in H&N cancer patients treated with either RT or RT-CT.**

Honey (topical) – H&N - RT or RT-CT – prevention

- **Guideline: No guideline possible (LoE II)**

Honey (topical) – hematologic cancer – CT – treatment

- **Guideline: No guideline possible (LoE III)**

Honey (topical) – hematologic or solid cancer – CT – prevention

- **Guideline: No guideline possible (LoE III)**

Propolis (topical) – hematologic or solid cancer – CT – treatment

Propolis (topical and systemic) – H&N cancer – RT – prevention

Propolis (topical) – H&N cancer – CT – treatment

- **Guideline: No guideline possible (LoE III)**

Traumeel (topical and systemic) – hematologic cancer (pediatric) – HSCT – prevention

- Guideline: No guideline possible (LoE II)

Traumeel (topical and systemic) – H&N cancer – RT or RT-CT – prevention

- Guideline: No guideline possible (LoE III)

Artificial moistening – Hematologic cancer – HSCT – prevention

Artificial humidification – H&N cancer – RT or RT-CT – prevention

- Guideline: No guideline possible (LoE III)

N-acetyl cysteine (NAC) – hematologic cancer – HSCT – prevention

- Guideline: No guideline possible (LoE II)

Curcumin (topical) – H&N cancer – RT – treatment

- Guideline: No guideline possible (LoE III)

Hangeshashinto (topical) – solid cancer – CT – prevention

- Guideline: No guideline possible (LoE II)

Chamomile (topical) – solid cancer – CT – prevention

- Guideline: No guideline possible (LoE III)

Chamomile (topical) – hematologic cancer – HSCT – prevention

- Guideline: No guideline possible (LoE III)

Probiotics based on Lactobacillus brevis cd2 lozenges (topical & systemic) – H&N cancers – RT-CT – prevention

- Guideline: No guidelines possible (LoE II)

Probiotics based on Ag013 bacteria (topical) – H&N cancer – CT – prevention

- Guideline: No guidelines possible (LoE III)

Phenylbutyrate gel formulation mouthwash (topical) – H&N cancers – RT/RT-CT – treatment

- Guideline: No guidelines possible (LoE III)

Phenytoin (topical) – H&N cancer -RT/RT-CT – prevention

- Guideline: No guidelines possible (LoE III)

Oral beta-glucan (systemic) – Solid cancer - CT – prevention

- Guideline: No guidelines possible (LoE IV)

Platelet gel supernatant (topical) – H&N cancer - RT/RT-CT – prevention

- Guideline: No guidelines possible (LoE III)

Ankaferd hemostat (topical & systemic) – Hematologic cancer – CT – treatment

- Guideline: No guidelines possible (LoE IV)

Detailed publication

Photobiomodulation for the management of oral mucositis in cancer patients

Citation

Zadik Y, Arany PR, Fregnani ER, Bossi P, Antunes HS, Bensadoun RJ, Gueiros LA, Majorana A, Nair RG, Ranna V, Tissing WJE, Vaddi A, Lubart R, Migliorati CA, Lalla RV, Cheng KKF, Elad S. Systematic review of photobiomodulation for the management of oral mucositis in cancer patients and clinical practice guidelines. Support Care Cancer 27, 3969–3983 (2019).

Prevention of oral mucositis in hematopoietic stem cell transplantation

- **Guideline category: Recommendation (LoE I)**
- **Guideline statement: The panel recommends the use of intra-oral 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 total body irradiation using one of the selected protocols; following the specific PTPs of the selected protocol is recommended for optimal therapy.**

Cancer treatment modality	Wavelength (nm)	Power density (irradiance; mW/cm ²)	Time per spot (sec)	Energy density (fluence; J/cm ²)	Spot size (cm ²)	Number of sites	Duration
HSCT	632.8	31.25	40	1.0	0.8	18	From day after cessation of conditioning for 5 days
	650	1000 *	2	2.0	0.04	54-70	From 1 st day of conditioning till day + 2 post-HSCT(for 7-13 days)

Prevention of oral mucositis in head and neck cancer patients treated with radiotherapy

- **Guideline category: Recommendation (LoE II)**
- **Guideline statement: The panel recommends the use of intra-oral PBM therapy using low-level laser therapy for prevention of OM in adult patients receiving RT to the H&N (without CT); the specific PTPs of the selected protocol should be followed for optimal**

therapy. Safety considerations unique to patients with oral cancer should be considered.

Cancer treatment modality	Wavelength (nm)	Power density (irradiance; mW/cm ²)	Time per spot (sec)	Energy density (fluence; J/cm ²)	Spot size (cm ²)	Number of sites	Duration
RT	632.8	24	125	3.0	1	12	Entire RT course

Prevention of oral mucositis in head and neck cancer patients treated with radiotherapy and chemotherapy

- **Guideline category: Recommendation (LoE I)**
- **Guideline: The panel recommends the use of intra-oral PBM therapy using low-level laser therapy for the prevention of OM in adult patients receiving RT and CT for H&N cancer; the specific PTPs of the selected protocol should be followed for optimal therapy. Safety considerations unique to patients with oral cancer should be considered.**

Cancer treatment modality	Wavelength (nm)	Power density (irradiance; mW/cm ²)	Time per spot (sec)	Energy density (fluence; J/cm ²)	Spot size (cm ²)	Number of sites	Duration
RT-CT	660	417 *	10	4.2	0.24	72	Entire RT course
	660	625 *	10	6.2	0.04	69	Entire RT course

Prevention of oral mucositis in cancer patients treated with chemotherapy

- **Guideline: No guideline possible**

Safety Analysis

In all analyzed RCTs, no short- or long-term adverse events with PBM treatments were reported, despite significant variations in the PTPs. However, in one cohort study, 15% of patients experienced an immediate (non-painful) burning sensation after intra-oral 635-nm diode laser treatment.

Detailed publication

Agents for the management of cancer treatment-related gastrointestinal mucositis

Citation

Bowen JM, Gibson RJ, Collier JK, Blijlevens N, Bossi P, Al-Dasooqi N, Bateman EH, Chiang K, de Mooij C, Mayo B, Stringer AM, Tissing W, Wardill HR, van Sebille YZA, Ranna V, Vaddi A, Keefe DM, Lalla RV, Cheng KKF, Elad S. Systematic review of agents for the management of cancer treatment-related gastrointestinal mucositis and clinical practice guidelines. Support Care Cancer 27, 4011–4022 (2019)

Hyperbaric oxygen therapy

- **Guideline category: Suggestion (LoE II)**
- **Guideline statement: Suggestion for treatment of radiotherapy-induced proctitis**

Probiotics

- **Guideline: Suggestion (LoE III)**
- **Guideline statement: The panel suggest that probiotics containing *Lactobacillus* spp., may be beneficial for prevention of chemoradiotherapy and radiotherapy induced diarrhea in patients with pelvic malignancy.**

Probiotics

- **Guideline: No Guideline Possible for prevention of diarrhea due to chemotherapy alone.**

Ciprofloxacin and metronidazole

- **Guideline: No Guideline Possible**

Famotidine (oral)

- **Guideline: No Guideline Possible**

Fat-modified diet

- **Guideline: No Guideline Possible**

Fiber (with combinations of prebiotics, nutritional supplements, and probiotics)

- **Guideline: No Guideline Possible**

Formalin (rectal)

- **Guideline: No Guideline Possible**

Glutamine (oral)

- **Guideline: No Guideline Possible**

Octreotide (intramuscular)

- [Guideline: No Guideline Possible](#)

Palifermin

- [Guideline: No Guideline Possible](#)

Sodium butyrate (enema)

- [Guideline: No Guideline Possible](#)

Steroid (beclomethasone)

- [Guideline: No Guideline Possible](#)

Sucralfate (oral)

- [Guideline: No Guideline Possible](#)

Oral mucositis guidelines that were rolled over from the 2013 Guidelines update

Patient-controlled analgesia with morphine – HSCT – treatment

- **Guideline: Recommendation (LoE II)**
- **Guideline statement: The panel recommends that patient-controlled analgesia with morphine be used to treat pain due to oral mucositis in patients undergoing HSCT.**

PTA (polymyxin, tobramycin, and amphotericin B) (as a lozenge or a paste) – H&N cancer – RT - prevention

- **Guideline: Recommendation against (LoE III)**
- **Guideline statement: The panel recommends that PTA antimicrobial lozenges and paste not be used to prevent OM in patients receiving RT for H&N cancer.**

BCoG (bacitracin, clotrimazole, and gentamicin) (as a lozenge) - H&N cancer – RT – prevention

- **Guideline: Recommendation against (LoE III)**
- **Guideline statement: The panel recommends that BCoG antimicrobial lozenges not be used to prevent OM in patients receiving RT for H&N cancer.**

Iseganan (mouthwash) – HSCT – prevention

- **Guideline: Recommendation against (LoE II)**
- **Guideline statement: 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.**

Iseganan (mouthwash) – H&N cancer – RT or RT-CT – prevention

- **Guideline: Recommendation against (LoE II)**
- **Guideline statement: The panel recommends that iseganan antimicrobial mouthwash not be used to prevent OM in patients receiving RT or RT-CT for H&N cancer.**

Pentoxifylline (systemic, PO) – HSCT – prevention

- **Guideline: Suggestion against (LoE III)**
- **Guideline statement: The panel suggests that systemic pentoxifylline, administered orally, not be used to prevent OM in patients undergoing bone marrow transplantation.**

Pilocarpine (systemic, PO) – H&N cancer – RT – prevention

- **Guideline: Suggestion against (LoE III)**
- **Guideline statement: The panel suggests that systemic pilocarpine, administered orally, not be used to prevent OM in patients receiving RT for H&N cancer.**

Pilocarpine (systemic, PO) – HSCT – prevention

- **Guideline: Suggestion against (LoE II)**
- **Guideline statement: 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.**

GI mucositis guidelines that were rolled over from the 2013 Guidelines update

Amifostine (systemic, IV) – prevention

- **Guideline: Recommendation (LoE II)**
- **Guideline statement: The panel recommends that intravenous amifostine be used, at a dose of ≥ 340 mg/m², to prevent radiation proctitis in patients receiving RT.**

Amifostine (systemic, IV) – prevention

- **Guideline: Suggestion (LoE III)**
- **Guideline statement: The panel suggests that intravenous amifostine be used to prevent esophagitis induced by RT-CT in patients with non-small cell lung carcinoma.**

Octreotide (systemic, SC) – treatment

- **Guideline: Recommendation (LoE II)**
- **Guideline statement: The panel recommends that octreotide, at a dose of ≥ 100 μ g subcutaneously twice daily, be used to treat diarrhea induced by standard- or high dose CT associated with HSCT, if loperamide is ineffective.**

Sucralfate (systemic, enema) – treatment

- **Guideline: Suggestion (LoE III)**
- **Guideline statement: The panel suggests that sucralfate enemas be used to treat chronic radiation-induced proctitis in patients with rectal bleeding.**

Sucralfate (systemic, PO) – treatment

- **Guideline: Recommendation against (LoE I)**
- **Guideline statement: The panel recommends that systemic sucralfate, administered orally, not be used to treat gastrointestinal mucositis in patients receiving RT for a solid tumor.**

Sulfasalazine (systemic, PO) – prevention

- **Guideline: Suggestion (LoE II)**
- **Guideline statement: 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.**

ASA (5-acetyl salicylic acid), mesalazine, olsalazine (systemic, PO) – prevention

- **Guideline: Recommendation against (LoE I)**
- **Guideline statement: The panel recommends that 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.**

Misoprostol (systemic) – prevention

- **Guideline: Recommendation against (LoE I)**
- **Guideline statement: The panel recommends that misoprostol suppositories not be used to prevent acute radiation-induced proctitis in patients receiving RT for prostate cancer.**

Abbreviations

BOC – Basic oral care

CHX – Chlorhexidine

CT – Chemotherapy

EPO – Erythropoietin

H&N – Head & neck

HSCT – Hematopoietic stem cell transplantation

G-CSF – Granulocyte colony stimulating factor

GM-CSF – Granulocyte–macrophage colony stimulating factor

KGF – Keratinocyte growth factor

LoE – Level of evidence

OM – Oral mucositis

PBM – Photobiomodulation

PO – Per os

PTPs - PBM therapy parameters

rhEGF – Recombinant human epidermal growth factor

RT – Radiotherapy

RT-CT – Radiochemotherapy

SC – Subcutaneous

IV – Intravenous