### Treatment cost comparison for management of oral mucositis and associated pain<sup>11,12</sup>

Product	Dosing regimen <sup>12</sup>	Pack size	Price <sup>11</sup>	Cost per day
Mucosamin Mouthwash	5-10ml 3-4 x daily	250ml	£19.00	£1.14 - £3.04
Mucosamin Oral Spray	2-3 x sprays 3-4 x daily	30ml (~ 240 sprays)	£19.00	£0.48 - £0.95
Caphosol mouthwash	1 dose (2 x UDVs - Part A + B) 4-10 x daily	30 doses 120 doses	£34.28 £130.70	UDVs: £4.36- £11.42 Tablets: £4.57 - £11.52
Gelclair	Stirred in water 3 times daily or as required	21 x 15ml sachets	£34.76	£4.91

# Mucosamin<sup>®</sup> Mouthwash and Mucosamin<sup>®</sup> Spray (Sodium hyaluronate and synthetic amino acids - glycine, L-Proline, L-Leucine, L-Lysine HCL) Prescribing Information

Presentation: Mouthwash Topical oral solution Spray Topical fluid gel Indications: Mouthwash At start of radiological therapy or chemotherapy to help reduce incidence of oral mucositis; treatment of oral mucositis due to radiotherapy or chemotherapy; ulcerative pathologies of oral cavity (e.g. pemphigus, pemphigoid, erosive lichen planus); recurrent aphthous stomatitis; following surgical operations on tongue and oral mucosa; burning mouth syndrome. Spray Oral mucositis due to radiotherapy or chemotherapy. Dosage and method of use: Mouthwash Pour 5-10 ml into mouth, distributing product evenly throughout oral cavity and keeping in mouth for at least one minute. Use 3 or 4 times a day. Do not rinse after treatment. For rear sections of oral cavity, product can be gargled. May be diluted with water, according to severity of symptoms. Spray Apply uniform layer into oral cavity by repeatedly spraying until the entire affected area is covered, 3 or 4 times a day according to severity of symptoms. Contraindications: Known hypersensitivity to ingredients. No reports of side effects or interactions with drugs or medicinal substances. No known secondary effects during pregnancy and breastfeeding; use at physician's discretion. Legal category: Class IIa Medical Device. Cost: Mouthwash £19 for 250ml bottle. Spray £19 for 30ml spray nozzle bottle. CE number: CE 0373. Manufacturer: Professional Dietetics S.p.A. - Via Ciro Menotti, 1/A - 20129 Milan - Italy Distributor: Aspire Pharma Ltd, Unit 4, Rotherbrook Court, Bedford Road, Petersfield, Hampshire GU32 3QG, UK. Date last reviewed: September 2022. Version number: 1010461476 v 3.0

References 1. Available from: https://www.ons.org/pep/mucositis/ [Accessed September 2022] 2. Lalla, R. V. Chemotherapy or radiation-induced oral mucositis. Dent Clin N Am. 2014: 58: 341-349 3. Miller, M. et al. (2012) Prevention and Treatment of Oral Mucositis in Children with Cancer, Journal of Pediatric Pharmacology and Therapeutics, 17(4); pp. 340-350. 4. Colella, G. et al. Effi cacy of a spray compound containing a pool of collagen precursor synthetic amino acids ( L-Proline, L-Leucine, L-Lysine and Glycine) combined with sodium hyaluronate to manage chemo/radiotherapy-induced oral mucositis. Int J Immunopathol Pharmacol. 2010: 23(1): 143-151 5. Favia, G. et al. Accelerated wound healing of oral soft tissues and angiogenic effect induced by a pool of amino acids combined to sodium hyaluronate (Aminogam). J Biol Regul Homeost Agents. 2008: 22(2): 109-116 6. Mariggio, M. et al. Enhancement of fi broblast proliferation, collagen biosynthesis and production of growth factors as a result of combining sodium hyaluronate and amino acids. Int J I mmunopathol Pharmacol. 2009: 22(2):485-492 7. Colella, G. et al. Amino acid-enriched sodium hvaluronate enhances keratinocyte scattering, chemotaxis and wound healing through B1-dependent mechanisms, J of Stomatol Invest, 2009; 3: 21-29 8, Cirillo, N, A hvaluronic acid-based compound inhibits fi broblast senescence induced by oxidative stress in vitro and prevents oral mucositis in vivo. J of Cell Phys. 2014. 9. Mucosamin Mouthwash and Mucosamin Oral Spray Instructions For Use. 10. Campos, M. et al. Oral mucositis in cancer treatment: Natural history, prevention and treatment (review). Mol Clin Oncol. 2014: 2; 337- 340 11. UK Drug Tariff September 2022 12. MIMS: https://www.mims.co.uk/ (accessed September 2022) 13. Kapoor, P. et al. (2011) Topical hyaluronic acid in the treatment of oral ulcers. Indian J Dematol. 56(3): 300-302.

1010461474 v 7.0 September 2022



## TARGETED TREATMENT FOR ORAL MUCOSITIS



glycine, L-proline, L-leucine and L-lysine HCl

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Aspire Pharma Ltd. (Tel: 01730 231148)







glycine, L-proline, L-leucine and L-lysine HCl



- Available as a mouthwash and convenient oral spray
- Protects, relieves and heals oral mucositis
- Suitable for both adults and children
- Cost effective

## It is estimated that:



40% of patients receiving chemotherapy will develop some degree of oral mucositis<sup>1</sup>



80% of patients receiving high doses of chemotherapy before haematopoietic stem cell transplant will develop some degree or oral mucositis<sup>2</sup>

Around 100% of patients who have radiotherapy therapy for head and neck cancer will develop some form of oral mucositis<sup>1</sup>



Up to 80% of children undergoing chemotherapy will experience some degree of mucositis<sup>3</sup>



## The role of hyaluronic acid (HA)

- Key component of connective tissue<sup>4</sup>
- Serves as scaffold for extracellular matrix (ECM) proteins <sup>6</sup>
- Acts as an antioxidant protects tissues from damage caused by reactive oxygen species<sup>7</sup>
- Supports wound healing<sup>5,7</sup>



### The role of amino acids

#### (glycine, L-proline, L-leucine and L-lysine HCl)

- Support the role of Hyaluronic Acid<sup>9</sup>
- Assist in the process of wound repair<sup>6</sup>

## How does Mucosamin work?

#### **Protection**

 Forms a barrier to help protect oral mucosa<sup>9</sup>

#### **Relief from dry mouth**

• Hydrates and modulates osmotic balance to help reduce incidence of oral mucositis<sup>6</sup>

### Localised benefits

- Moderates the inflammatory response<sup>13</sup>
- Protects local mucosa from free radicals<sup>7</sup> to help prevent tissue injury<sup>8</sup>
- Creates a film to cover expose d nerve endings, to provide pain relief<sup>10</sup>





#### Wound healing

mucosamin

• Supports epithelial wound repair of the oral mucosa<sup>5.7</sup>





