Title: Samarium¹⁵³-lexidronam (SML) for bone pain due to skeletal

metastases August 1999

Agency: Medicare Services Advisory Committee (MSAC)

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Aim

To assess the safety and effectiveness of the service and under what circumstances public funding should be supported for the service.

Conclusions and results

SML appears to be as safe as the alternative Strontium⁸⁹, in terms of

haematological toxicity and other adverse events. The prognosis for the majority of patients is poor and most will only receive a single dose. Still,

the toxicity risk of repeated dosages should be investigated.

Effectiveness SML is effective in relieving bone pain due to skeletal metastases from

carcinoma of the breast and at least as effective as Strontium⁸⁹ for carcinoma of the prostate. In one trial SML led to decreased use of

analgesics.

Cost-effectiveness Cost minimisation analysis would be useful, but was not undertaken

due to insufficient costing data and because the proposed fee for SML is

significantly less than for Strontium⁸⁹.

Recommendations

SML receive public funding for relief of bone pain in patients with skeletal metastases from: carcinoma of the prostate where hormonal therapy has failed; or carcinoma of the breast where hormonal and chemotherapy have failed; and the disease is poorly controlled by conventional radiotherapy or where this is inappropriate due to wide distribution of the sites of bone pain.

Method

MSAC conducted a systematic review of medical literature on SML from 1966 until September 1998 via Medline, HealthSTAR, Toxline, EmBase, SciSearch, Current Contents, the Cochrane Library, Biosis, CANCERLIT, Pascal and Elsevier Biobase and Derwent databases. Due to a lack of clinical trial data directly comparing SML with Strontium⁸⁹ a placebo was chosen as the common comparator.