Title	**Samarium153-lexidronam (SML) for Bone Pain due to Skeletal Metastases, August 1999**
Agency	**MSAC, Medicare Services Advisory Committee**
	Commonwealth Department of Health and Ageing,
	GPO Box 9848 Canberra ACT 2601 Australia;
	tel: +61 2 6289 6811, fax: +61 2 6289 8799, http://www.msac.gov.au
Reference	MSAC application 1016. Assessment report ISSN 1443-7120

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

Safety: SML appears to be as safe as the alternative Strontium89, in terms of hematological 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 minimization 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 should 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.