



SAM-2

¹⁵³Sm-ETHYLENE DIAMINE TETRAMETHYLENE PHOSPHONATE

[¹⁵³Sm-EDTMP]

(THERAPEUTIC -FOR INTRAVENOUS ADMINISTRATION)

- Efficacious treatment for palliation of intense bone pain due to metastases in advanced stages of breast/lung/prostate cancer
- Preferred agent for palliation of pain as it also enables imaging of pre and post therapy conditions
- Relatively low myelotoxicity compared to other palliation agents

Description	: ¹⁵³ Sm - EDTMP in normal saline/phosphate buffer solution
Appearance	: Clear, colourless, aqueous preparation
Radioactive concentration	: 8– 25 mCi/ml [296-925 MBq/ml] on the reference date and time
Radionuclidic purity	: >99% as ¹⁵³ Sm
pH	: 7–8
Radiochemical purity	: Not less than 95% as ¹⁵³ Sm-EDTMP
Shelf life	: To be used within 3 days from the reference date
Storage	: Store at 2-8° C, with adequate shielding
Availability	: Once a month
Dosage and administration	: Normal adult dose is 1mCi /kg (37 MBq/0.45 m ²), administered intravenously over a period of one minute followed with a saline flush
Available pack sizes	: Typically 60 mCi (2.22 GBq) and 120 mCi (4.44 GBq)



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Code	Description	Activity
SAM-2	¹⁵³ Sm-Ethylene diamine tetramethylene phosphonate [¹⁵³ Sm-EDTMP] Injection	60 mCi, 120 mCi as on the reference date

Physical Characteristics of Samarium-153

Half life	46.3 h (1.9 d)
Decay mode	β^-
E _{β^-} (%)	640 keV (40%), 710 keV (40%), 813 keV (20%)
E _{γ} (%)	69.7 keV (5.32%), 103 keV (28%)

Decay Chart of Samarium-153

Hours	Multiplication Factor	60 mCi on Ref. date	120 mCi on Ref. date
-24	1.43	85.8	171.6
-12	1.19	71.4	142.8
Reference time	1.00	60.0	120.0
1	0.99	59.4	118.8
2	0.97	58.2	116.4
4	0.94	56.4	112.8
6	0.91	54.6	109.2
8	0.89	53.4	106.8
10	0.86	51.6	103.2
12	0.84	50.4	100.8
16	0.79	47.4	94.8
20	0.74	44.4	88.8
24	0.70	42.0	84.0
48	0.49	29.4	58.8



¹⁵³Sm-EDTMP Production Plant



For placing the orders and further details please contact
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