

<b><sup>153</sup>Sm</b>	<b><sup>153</sup>Sm samarium chloride radioactive precursor for labelling MULTIBONE kit</b>
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<i>Product code:</i>	<b>Sm-RA-26</b>
<i>Marketing Authorisation Number:</i>	<b>OGYI-T-9192/01</b>
<i>Description:</i>	Clear, colourless, sterile solution of <sup>153</sup> Sm-samarium chloride in physiological saline (0.9 % sodium chloride solution)
<i>Activity per vial:</i>	2500-5000 MBq under
<i>Specific activity:</i>	≥ 5 GBq/mg
<i>Radioactive concentration:</i>	2500 MBq/ml
<i>Radionuclidic impurities:</i>	≤ 0.2 %
<i>Radiochemical purity:</i>	≥ 95 %
<i>pH:</i>	5 – 6
<i>Expiry time:</i>	5 days from manufacture
<i>Other information:</i>	<sup>153</sup> Sm samarium chloride precursor must not be administered directly to the patients. It is for labelling MULTIBONE kit. Only <sup>153</sup> Sm- MULTIBONE injection can be administered.
<i>Physical properties:</i>	Physical half life: 46.27 hrs Energy of beta particles: 705 keV (17.5 %), 808 keV (49.6 %) Energy of gamma photons: 103 keV (29.8 %), 635 keV (32.2 %)
<i>Storage:</i>	Store at room temperature in its own container, in accordance with the regulations on radioactive materials.
<i>Packaging:</i>	Supplied in 6 ml injection vial closed with rubber stopper and tear-off aluminium cap. The labelled vial is placed in a lead container, which contains a paper insert. (KT 2-3)  The lead container is packed in a labelled tear-off metal can, which contains plastic insert (Type A packaging).

**<sup>153</sup>Sm ISOTOPE DECAY FACTORS**

min hours	0 0.0	20 0.3	40 0.7	60 1.0	80 1.3	100 1.7	120 2.0	140 2.3	160 2.7	180 3.0	200 3.3	220 3.7	240 4.0
0	1.0000	0.9950	0.9901	0.9851	0.9802	0.9753	0.9705	0.9656	0.9608	0.9561	0.9513	0.9466	0.9418
4	0.9418	0.9371	0.9325	0.9278	0.9232	0.9186	0.9140	0.9095	0.9050	0.9004	0.8960	0.8915	0.8871
8	0.8871	0.8826	0.8782	0.8739	0.8695	0.8652	0.8609	0.8566	0.8523	0.8481	0.8439	0.8396	0.8355
12	0.8355	0.8313	0.8272	0.8230	0.8189	0.8149	0.8108	0.8068	0.8027	0.7987	0.7948	0.7908	0.7869
16	0.7869	0.7830	0.7791	0.7752	0.7713	0.7675	0.7636	0.7598	0.7561	0.7523	0.7485	0.7448	0.7411
20	0.7411	0.7374	0.7337	0.7301	0.7265	0.7228	0.7192	0.7156	0.7121	0.7085	0.7050	0.7015	0.6980
24	0.6980	0.6945	0.6911	0.6876	0.6842	0.6808	0.6774	0.6740	0.6707	0.6673	0.6640	0.6607	0.6574
28	0.6574	0.6541	0.6509	0.6476	0.6444	0.6412	0.6380	0.6348	0.6317	0.6285	0.6254	0.6223	0.6192
32	0.6192	0.6161	0.6130	0.6100	0.6069	0.6039	0.6009	0.5979	0.5949	0.5920	0.5890	0.5861	0.5832
36	0.5832	0.5803	0.5774	0.5745	0.5716	0.5688	0.5659	0.5631	0.5603	0.5575	0.5548	0.5520	0.5492
40	0.5492	0.5465	0.5438	0.5411	0.5384	0.5357	0.5330	0.5304	0.5277	0.5251	0.5225	0.5199	0.5173
44	0.5173	0.5147	0.5122	0.5096	0.5071	0.5045	0.5020	0.4995	0.4970	0.4946	0.4921	0.4896	0.4872
48	0.4872	0.4848	0.4824	0.4800	0.4776	0.4752	0.4728	0.4705	0.4681	0.4658	0.4635	0.4612	0.4589
52	0.4589	0.4566	0.4543	0.4520	0.4498	0.4476	0.4453	0.4431	0.4409	0.4387	0.4365	0.4343	0.4322
56	0.4322	0.4300	0.4279	0.4258	0.4236	0.4215	0.4194	0.4173	0.4153	0.4132	0.4111	0.4091	0.4070
60	0.4070	0.4050	0.4030	0.4010	0.3990	0.3970	0.3950	0.3931	0.3911	0.3892	0.3872	0.3853	0.3834