Table 1. Predicted decay energies and half-lives for heavy Md isotopes.

Isotope	260	261	262
Q_β (MeV)	0.5[3] - 0.7[2]	0.15[2] to stable[3]	1.1[3] - 1.7[2]
$T_{1/2}$	2 - 7 h	50 d to stable	5 m - 1/2 h
Q_{ec} (MeV)	0.5[2] - 1.5[3]	stable[2,3]	0.9[3] - stable[2]
$T_{1/2}$	1 - 10 h	stable	4 h - stable
SF	≈200 d	2 - 200 μs	≈0.2 s

The even-mass isotopes of mendelevium, like those of einsteinium, are expected to exhibit isomerism due to combination of the 101st proton (assigned as the 7/2-(514) proton state) with low-lying, high-spin neutron states such as 7/2+(613) and 9/2+(615). Isomers are currently known for ^{254}Md and ^{258}Md. The 55-d alpha-emitting isomer of ^{258}Md is believed to be the ground state and has been given an 8- assignment; no e.c. decay[4] was observed. It is most likely composed of the low-lying 7/2-(514) proton and the 9/2+(615) neutron states. A 43-m isomer of ^{258}Md has been produced[5] by the (α,n) reaction on ^{255}Es and is believed to decay by e.c. capture. It is probably the 1$^-$ level formed by the combination of the same two single particle states and should be excited by perhaps 100 keV over the ground state.

A high-spin (7-, 8-) isomer of ^{256}Md, resulting from the coupling of the 7/2-(514) ↓ proton with the 7/2+(613) ↑ or possibly the 9/2+(615) ↓ neutron states, should also be expected. The decay energy of the 7- state can be estimated to be ≈100 keV more than for the known 76-m ^{256}Md ground state (0$^-$) which decays primarily by e.c. capture, but it probably has a considerably