SUBJECT: Care of Exradin M1 and M2 Magnesium Ionization Chambers

The following information is provided as a service to our users and customers:

Exradin M1 and M2 Magnesium Ionization Chambers are manufactured from pure magnesium, a chemically active material. Due to the physical nature of this material, the response of Magnesium Ionization Chambers will change over time.

To evaluate the change in signal of a magnesium chamber, the signal should be cross calibrated with a chamber of known stability before each use. This can be done with an in-air comparison jig that suspends both chambers in an external therapy beam in a reproducible manner. Any change in the signal of the magnesium chamber can be noted by this comparison, and the change accounted for during the following measurements.

The following precautions are meant to help slow down these changes:

Magnesium reacts slowly in cold water and humid atmospheres, and it oxidizes in air. These reactions increase with temperature. When not in use, store the magnesium chamber in a cool dry location. An airtight container with a fresh desiccant is recommended.

It is not recommended that the magnesium chamber be submerged in a water tank. If necessary, carefully cover the chamber with a protective plastic covering. When measurements have been completed, dry the chamber and the cable thoroughly and return it to the desiccant storage container.

Avoid exposure to acids, halogens or heat.