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// SUV cannot be calculated if any of the specified DICOM attributes are missing or empty or zero
if Corrected Image (0x0028,0x0051) contains ATTN and DECAY and Decay Correction (0x0054,0x1102) is START {
    if Units (0x0054,0x1001) are BQML {
        half life = Radionuclide Half Life (0x0018,0x1075) in Radiopharmaceutical Information Sequence (0x0054,0x0016) // seconds
        if Series Date (0x0008,0x0021) and Time (0x0008,0x0031) are not after Acquisition Date (0x0008,0x0022) and Time (0x0008,0x0032) {
            scan Date and Time = Series Date and Time
            start Time = Radiopharmaceutical Start Time (0x0018,0x1072) in Radiopharmaceutical Information Sequence (0x0054,0x0016)
            // start Date is not explicit ... assume same as Series Date; but consider spanning midnight
            decay Time = scan Time - start Time // seconds
            // Radionuclide Total Dose is NOT corrected for residual dose in syringe, which is ignored here ...
            injected Dose = Radionuclide Total Dose (0x0018,0x1074) in Radiopharmaceutical Information Sequence (0x0054,0x0016) // Bq
            decayed Dose = injected Dose * pow (2, -decay Time / half life)
            weight = Patient's Weight (0x0010,0x1030) // in kg
            SUVbwScaleFactor = (weight * 1000 / decayed Dose)
            // Rescale Intercept is required to be 0 for PET, but use it just in case
            // Rescale slope may vary per slice (GE), and cannot be assumed to be constant for the entire volume
            SUVbw = (stored pixel value in Pixel Data (0x7FE0,0x0010) * Rescale Slope (0x0028,0x1053) + Rescale Intercept (0x0028,0x1052)) * SUVbwScaleFactor
            // g/ml
        }
    }
}

```