Proposals for CCRI(II) Key Comparisons

The KCWG has considered the generic grouping table in CCRI(II)/05-04 and proposes that the radionuclides listed here are compared over the next ten years CCRI(II)/05-09. Together with the previous ten year programme of comparisons (P-32, Mn-54, Zn-65, Sr-89, Sr-90, Y-90, I-125, Eu-152, Ir-192, Tl-204, Pu-238 and Am-241) including Kr-85 that is scheduled for 2006, this will result in a twenty year period where every generic group has at least one comparison. Each comparison can then be used by the majority of NMIs for the purposes of supporting CMC claims for the measurement of other radionuclides in the same grouping.

Only one comparison has been proposed for each year to try and reduce the workload on the laboratories. The difficulty of measurement is indicated by colour, red being more difficult than yellow. The SIR is of course always available for gamma emitting radionuclides and radionuclides that have been or can be measured in the SIR are indicated *. The CCRI(II) comparison for Tc-99m is likely to be "ongoing" starting in 2006 and is the subject of the proposal in CCRI(II)/05-08.

It should be noted that participation in a CCRI(II) comparison using an appropriate method other than that indicated in the table is of course acceptable and indeed will lead to a more robust KCRV for that radionuclide, although the CMC coverage is then likely to be different and incomplete.

Nuclide	Half life	Description	Year	Source laboratory
^{55}Fe	2.741 (6) a	Pure electron capture or positron emitters	2005	NPL
^{99}Tc^{m}	6.0067 (10) h	Pure gamma emitter	2006 -	Each NMI
^{3}H	12.32 (2) a	Pure beta emitter by liquid scintillation counting	2007	LNE-LNHB
^{131}Cs	9.689 (16) d	Pure electron capture or positron emitters	2008	
^{35}S	87.32 (16) d	Pure beta emitter by pressurised proportional counter	2009	
^{109}Cd*	461.4 (12) d	Electron capture-gamma emitter by pressurised proportional counter	2010	
^{228}Th *	698.60 (23) d	Delayed state by pressurised proportional counter	2011	
^{222}Rn *	3.8235 (3) d	Delayed state by defined solid angle counting Delayed state by gas counting	2012	LNE-LNHB
^{123}Te^{m} *	119.3 (1) d	Pure gamma emitter	2013	
^{137}Cs *	30.018(25) a	Delayed state by (anti-) coincidence counting including tracer efficiency or by liquid scintillation counting or by pressurised proportional counter	2014	
^{133}Xe *	5.243 (1) d	Beta-gamma emitter by gas counting	2015	LNE-LNHB