## **Supplementary Material**

International Journal of Legal Medicine Michaud K, Grabherr S, Jackowski C, Bollmann MD, Doenz F, Mangin P Post-mortem imaging of sudden cardiac death

Fig. S1 Myocardial infarction by PMMR. T2-weighted short axis images presenting different ages of myocardial ischemic events as described by Jackowski et *al*: "Peracute infarction"- indistinctive hypointensive regions within the posterior wall (arrow) (a); "acute infarction" associated with hemopericardium – distended and clearly demarked hypointensity surrounded by a hyperintense margin within the lateral wall (arrow) with a hemopericardium due to a myocardial rupture (asterisk) (b); "subacute infarction" - distended hyperintensity within the posterior septum (arrow) (c); post-infarction scar of the myocardium described as "chronic infarction" -distended hypointense and shrunken posteroseptal and posterior wall (arrow)(d).

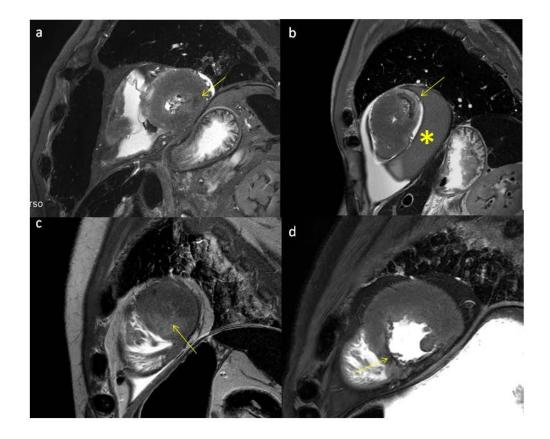


Fig.S2 Case of a 25-year-old athlete who died shortly after a football match; just after complaining about thoracic pain and palpitations. PMCT (a) showed cardiac hypertrophy with increased cardiac diameter (yellow line in a) compared to thoracic diameter (white line in a). The histological examination (here H&E stain) is necessary to appreciate the constellation of hypertrophy, fibrosis and small vessel disease and myocyte disarray (b). In this case autopsy showed a floppy mitral valve, which is not visualised in the radiological post-mortem investigation.



Fig.S3 Aortic valvular stenosis and calcification in a 45 year-old man detected by PMCTA. Calcification of the valve is visible in 2D (circle in a) as well as in 3D-reconstructions (b).The victim complained about thoracic pain and not feeling well the day before.

