Dear EBMT Member,

At the fourth Nuclear Security Summit that took place on the 1st of April 2016 in Washington, D.C, it was stated that a likely scenario for a terrorist attack is a Radiation Dispersal Device (RDD), also known as a “dirty bomb” – this consists of using an explosion to spread radioactive material. The blast and shrapnel caused by the explosion produce the expected major health hazards.

The EBMT Nuclear Accident Committee (NAC) convened a meeting in Paris on the 3rd of June 2016 to address the radiation issues, and how they may impinge on the functions of EBMT Centres. This meeting involved a small selected panel of experts from the French Institut de Recherche Biomédicale des Armées (IRBA) and the Institut de Radioprotection et de Sûreté Nucléaire (IRSN), the German Military Bundeswehr Institute of Radiobiology, the Swedish Radiation Emergency Medicine Center (KcRN) and the National Board of Health and Welfare, the UK Public Health England (PHEng), in addition to clinical experts from the EBMT.

The experts agreed that even though internal contamination usually does not lead to clinical symptoms in those situations, one could not exclude 100% the occurrence of acute radiation injuries and haematological problems in which bone marrow failure happened in the weeks following the explosion, especially if the RDD was detonated in a small room or if the victim was close to the explosion.

If such an incident occurs, we will be informing EBMT centres and provide appropriate advice from experts with information relating to the nature and outcome of victims. However the experts agreed that if the right measures - e.g. surface decontamination, removal of radioactive fragments and decorporation of internal contaminants - are taken immediately at the time of the incident, this should eliminate risk of clinically significant effects on the bone marrow.

*From the EBMT President and the Nuclear Accident Committee*