

HYBRID IMAGING SYSTEMS

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In general, hybrid imaging systems comprise tomographic imaging technologies that permit the acquisition of complementary anatomical and molecular or functional information for a higher diagnostic accuracy than that provided by each imaging technique individually. Most of the times, hybrid imaging relates to either PET/CT (positron emission tomography and computed tomography), PET/MR (PET in combination with magnetic resonance imaging) or SPECT/CT (single photon emission tomography and CT). Other combinations are possible and, many times, feasible, but they are either still anchored in test bed scenarios or without an immediate clinical application.

This talk will highlight the past, present and future of hybrid imaging systems with a focus on clinically versatile options. Focus will be given on the nuclear medicine components as the drives for hybrid imaging technologies.