



# TESIAMED

<b>Title:</b>	<b>TESIAMED - Tecniche di Simulazione Avanzata in Medicina (Advanced Simulation Techniques in Medicine)</b>
<b>Duration:</b>	<b>24 months</b>
<b>Start date:</b>	<b>January, 1st 2017</b>
<b>Closure date:</b>	<b>December, 31st 2018</b>
<b>Admissible costs:</b>	<b>860.328,07€</b>
<b>Co-founder:</b>	<b>PON M.I.S.E. ASSE I - Priorità di investimento 1.b - Azione 1.1.3</b>
<b>Partner:</b>	<b>MASMEC S.p.a. Emac S.r.l. University of Bari Aldo Moro</b>



## Project description:

The purpose of TESIAMED project is to study and create new systems for the simulation of minimally invasive surgical methods, increasingly requested in the surgical therapeutic field. In fact, the trend of the current clinical practice is to increasingly address minimally invasive methods that allow benefits in the first place for the patient (lower risk, mainly outpatient interventions, reduction of time, reduction of complications and sequelae, better course post-operative) and secondly, both for the doctor (rationalization and better organization of work) and for the hospital structure (lower organizational cost, reduction of expenses due to no need for hospitalization).

To achieve these results, the minimally invasive methodologies involve the use of sophisticated imaging, robotization and, in general, digitalization of surgery instruments, but it is however essential that the operator is particularly trained and prepared for the correct use of the same devices performing training sessions on surgical simulation devices.

The final goal of TESIAMED project is therefore to study and implement a complex surgical simulation / navigation system that adopts image fusion techniques (multimodal mode) and can integrate training aspects with clinical operational aspects.

Together with this realization we will address the aspect of education from the point of view of the methodology and setting up of an advanced simulation center.

There is therefore an emerging product innovation that develops in two directions:

1. New, interventional imaging/surgical/navigation systems based on state-of-the-art multimodal imaging techniques;
2. Integrated training room for high technology and high fidelity simulation systems, and recurrent training for surgical operators and pre-operative analysis of the actual clinical case.

