



## In which direction will future clinical research go?

I was on the train returning from a conference in Switzerland recently and the most common question I had from various participants and speakers was about in which direction future clinical research will go. Personally I do not like to make predictions on the future, since I am often disappointed when I realise that I missed my forecast completely, but now I will take the risk and I will even do so publicly.

I believe there will be four lines of major clinical research over the forthcoming years:

1. The actual roles of implant surface characteristics, materials, design and connection types. It is simply not acceptable that after 50 years of osseointegrated implantology that we still do not have sufficiently reliable clinical trials on such basic aspects. These questions must be finally addressed in a serious way, since so far clinical research has been heavily biased by commercial marketing, with the end result that today we are not even sure whether it is better to use a machined or a roughened surface, an internal or an external connection, or a cemented or a screw-retained prosthesis.
2. Treatment of peri-implantitis. We have a clinical problem that may affect as many as one out of five patients over a 10-year period and we still do not have sufficiently clear ideas on which are the most effective preventive and treatment strategies.
3. Treatment of patients with atrophic jaws. There is the need to better understand when augmentation procedures are needed, which are the most effective ones, and whether bone substitutes will be a concrete alternative to autogenous bone in most clinical indications.
4. Digital dentistry. The hot question is whether there will be changes in the way treatments are planned and delivered to patients. Now, I believe

that the technology is mature enough and priced reasonably enough to complete the digital revolution in dentistry. The revolution in diagnosis and therapy planning has already occurred, marked by relevant technological advancements in radiographic equipment and software to virtually plan complex rehabilitation. The next step will be to cut down time and costs for acquiring clinical information and to directly produce prosthetic devices at practices. We (the older generation) need to drastically change our way of thinking and collaborate with the younger generations who have a better predisposition in managing software and already live with a foot in the future. I also have to approach a new line of research (needless to say keeping the research methodology at a high standard), to compare what we have been used to doing with what we are most likely to do over the forthcoming years. In order to mark and facilitate this new era, I wish to announce the imminent foundation of an international Digital Dentistry Society (DD) ([www.digitaldentistryacademy.com](http://www.digitaldentistryacademy.com)) and the creation of the first International Postgraduate Course in Digital Dentistry ([www.digital-dentistry.org](http://www.digital-dentistry.org)). Also the structure of *EJOI* may change, possibly initially opening a section dedicated to clinical digital dentistry, and then we shall see how things will develop.

*EJOI* will therefore prioritise these four lines of research over the next 5 years, but shall remain open to other topics, just in case I fall short of my future forecast once more.

Happy reading!  
Marco Esposito  
Editor-in-Chief