Sperm freezing is one of the most utilized procedures within assisted reproduction, thus justifying each effort devoted to improve either the clinical results obtained from their use, survival rates, as well as the optimization of such protocols in order to be efficient and maintaining quality at the lowest costs.

In this sense, given the availability of a variety of sperm freezing methods, storage devices, and the scarcity of scientific reports on these topics, our aim with this presentation is to show the current protocols conducted in IVI Valencia for sperm freezing, step by step, justifying why these were selected for more than 20 years in order to optimize the process, as well as to discuss the advantages, pitfalls and unresolved issues linked with this topic.

We use a specific commercial media, given that previous results from our group demonstrated that the comparison among 4 different sperm freezing media yielded comparable results, thus keeping the least expensive one, on a dry ice surface at -80°C, into small holes in order to create 50-70 microl. spheres, that will be transferred into a cryotube once frozen, to be stored in our liquid nitrogen tanks, being a fast, reliable, and simple procedure enabling the rapid freezing with the lowest efforts, while maintaining comparable results as those obtained by straws.

On the other side, each ejaculate's use is optimized, given that a post-thawing test is conducted, and the possibility of thawing a limited number of pills, depending on the laboratory needs, which is very convenient in each patient or donor, but specially on those patients from abroad, or on those who preserved their fertility because a foreseeable loss of it, namely cancer or vasectomized males.