My experience of the ABS Research Sandpit

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I attended the ABS research sandpit session in the afternoon of 23rd January 2020, having submitted my research outline to the ABS office two weeks before. The session at which I was invited to speak had three study presentations in total – all at different stages of development. One was a trial proposal already submitted for funding, looking for ABS support; the other an observational study which was close to submission for funding; and finally my proposal, which was the least developed study of the three. Briefly, I had validated predictive markers and models for early radiotherapy side-effects following breast surgery as part of my PhD. I was now looking to develop and validate predictors of long-term radiotherapy side-effects, such as fibrosis and breast pain, particularly in the context of oncoplastic breast procedures and implant-based breast reconstruction.

The sandpit session was chaired by Mr Stuart McIntosh, Specialty Study Lead for Breast Surgery at the Royal College of Surgeons of England The panel consisted of members of the ABS Academic and Research committee including current members of the NCRI breast clinical studies group. Each presentation lasted approximately five minutes, followed by 15 minutes' discussion with the panel. I had questions about which study design to choose, the main study endpoint, types of oncoplastic surgery to be included, and potential funders. I had already given some thought to some of these points, for example, the poor documentation of side-effects in existing implant registries other than explantation, and the difficulty of collecting patient-reported outcomes (PROs) in any retrospective type of study. Nevertheless, panel members raised further queries. Could I access and use existing data? What would be the precise definition of my study endpoint? Had I done a statistical power calculation for my main chosen endpoint? These were additional points which I would need to address when developing the proposal. Some constructive changes were suggested, such as using change in breast appearance documented by photograph as the predicted endpoint, since the data which I already had for developing the models included patients' breast photographs taken at baseline, after surgery, and two years from radiotherapy. Some discussion of my study also evolved around incorporating a feasibility trial based on the results from model validation in the funding application.

I received written feedback within two weeks, documenting the points that were raised in the discussion and also details of suggested funders. It was encouraging to read that the panel felt my proposal addressed an important research question along with specific suggestions around the proposed methodology. The feedback has confirmed my idea to collect a relatively simple retrospective validation cohort in the first place, with defined inclusion and exclusion criteria as to the type of surgery, probably recruiting at multiple centres to get sufficient statistical power. I may then proceed to a further prospective study incorporating PROs, but will also consider some qualitative work with surgeons around the precise outcomes to be predicted and whether early or late side-effects would be more important to predict.

Overall, I found the experience at the research sandpit very useful, despite the fact that my study was at a relatively early stage of development. I was invited to present my study again at a later stage once it was a more concrete proposal. I also found it valuable to listen to the presentation and to take part in the discussion of the other study proposals at the session.