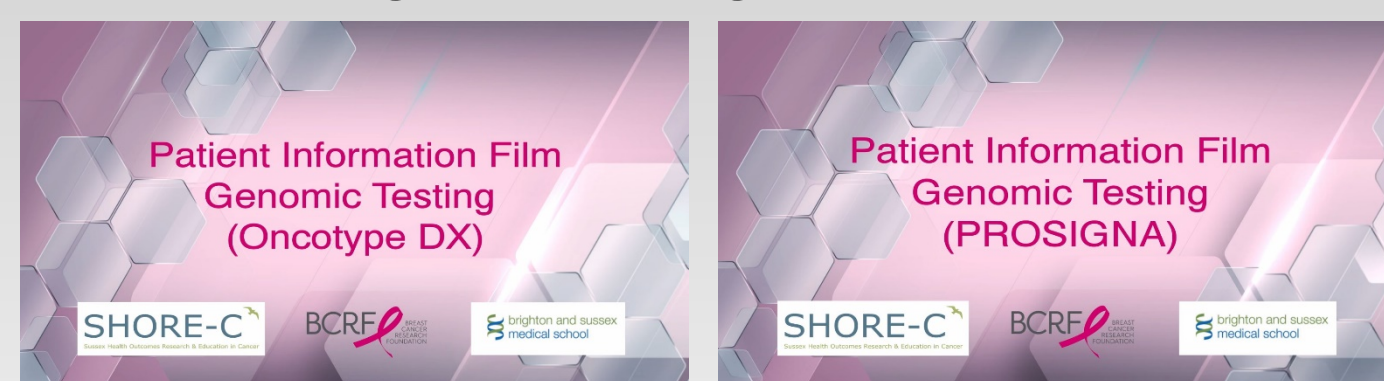


Background

Discussions between oncologists and patients about Gene Expression Profiling (GEP) risk of recurrence results can be challenging especially if scores are intermediate or close to the high or low risk of recurrence thresholds. Many clinical teams provide patients with information leaflets, but these often employ complex language written to meet regulatory guidelines rather than to educate effectively the end-user. We designed two 8-minute information films that were conversational in style with simple explanatory graphics and compared participants' knowledge retention after reading information leaflets with that following film viewing.



Objectives

Primary objective

- comparison of knowledge scores after watching the information film and following reading the leaflet

Secondary objectives

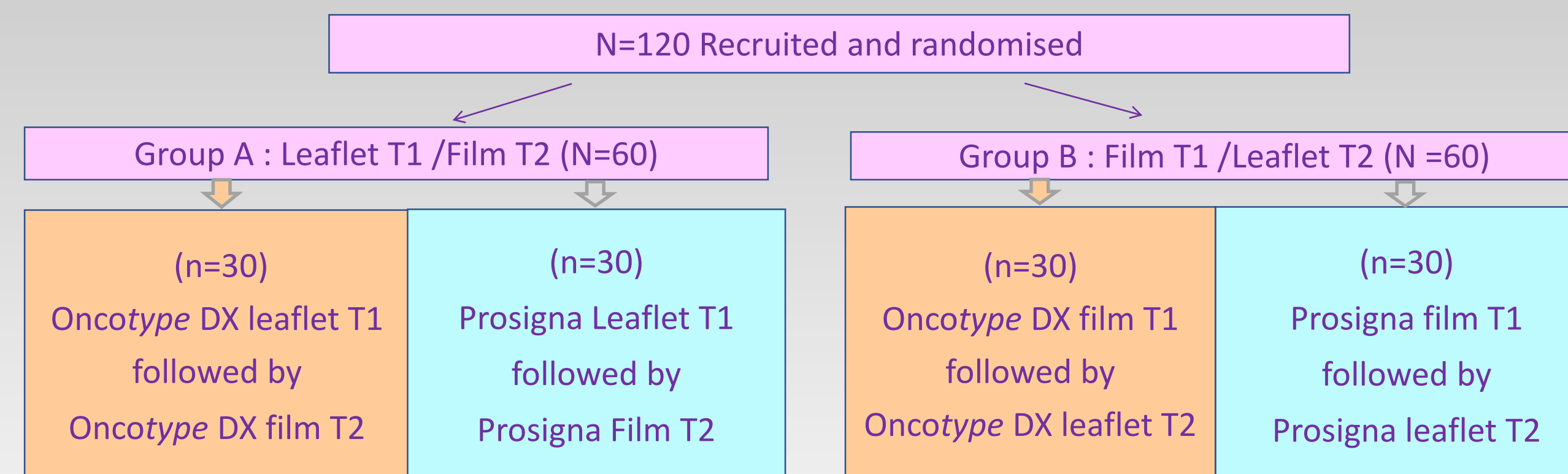
- influence that ordering of information format might have on knowledge scores
- participants' perceptions as to which modality most helped their understanding
- overall preferences for either film or leaflet
- reasons for perceptions and preferences

Participants

- 120 women without breast cancer, (45-75yrs) from varied socio-educational backgrounds who had access to a smartphone/tablet or computer to view information materials

Methods

- randomised factorial crossover design (see figure below)
- participants sent a link to either film or leaflet dependent on group allocation
- encouraged to read/watch information as many times as they wished and make notes
- knowledge (9 questions) determined at T1 via structured interview (telephone/Zoom as preferred)
- 24hrs later opposite information format sent i.e. leaflet or film
- participants re-interviewed at T2 and asked the same knowledge questions
- perceptions as to which format best aided understanding probed
- overall preferences for either film or leaflet format ascertained and reasons for these



Knowledge Score Results

- T1** knowledge scores (irrespective of GEP test described), were significantly higher following film viewing compared with those after reading the leaflet (**mean diff 4.1 points; P<0.0001; 95% CI 3.2, 5.0**)
- At **T2**
 - if leaflet read first, followed by film, mean knowledge scores were significantly increased (**5.3 points, p<0.0001; 95% CI 4.4, 6.3**)
 - if film viewed first followed by leaflet mean knowledge was significantly decreased (**2 points, p<0.01; 95% CI -3.1, -0.8**)
 - participants felt film helped them understand GEP information more (**82/120 ; 68.3% v 21/120; 17.5%**)

Preference Results

- majority of participants preferred the film format (**88/120; 73.3%**); leaflet (**28/120; 23.3%**); no preference **4 /120 (0.4%)**

Reasons for preferences

Film:- most participants cited the clarity, ease of understanding, & calm reassuring voice over *"..able to pick things up quicker than reading through the leaflet. .. film was really clear, concise and well-paced, it allowed me to really listen.not lots of medical terminology"*

" The film engages more of your senses, for me more information goes in. ...a more modern way to convey information, we expect information to be available this way on our phones and devices"

Leaflet:- some found leaflets more practical *"..a leaflet in your hand lets you re-read bits over and over and you can easily skip around or pass over bits.I would take it with me for my meeting with the doctor and use it ...to refer to bits I wanted to discuss"*

Conclusions

- the film was more effective at aiding participants' knowledge about GEP testing than written material
- seeing a film might help doctor/patient discussions and lead to more informed decision-making about chemotherapy
- we aim to test this hypothesis in a new study with patients in the UK, Italy and Spain

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