

**Background:**

- Balancing harms and putative benefits of treatment is a vital component of decision-making. Chemotherapy side-effects may be more tolerable if recurrence risk is reduced substantially. Over-treatment with drugs that make little difference to a patient’s risk of recurrence is unacceptable.
- Gene expression profiling tests can help with the estimation of risk. EndoPredict® is a multigene test which, together with clinico-pathologic parameters, produces an EPclin score that classifies risk of distant recurrence as low or high.
- We examined decisions pre & post EndoPredict® testing in patients with early stage, ER +ve, HER2 -ve breast cancer, judged to have equivocal indications for adjuvant chemotherapy.

**Aims:**

To compare pre and post EndoPredict® testing:-

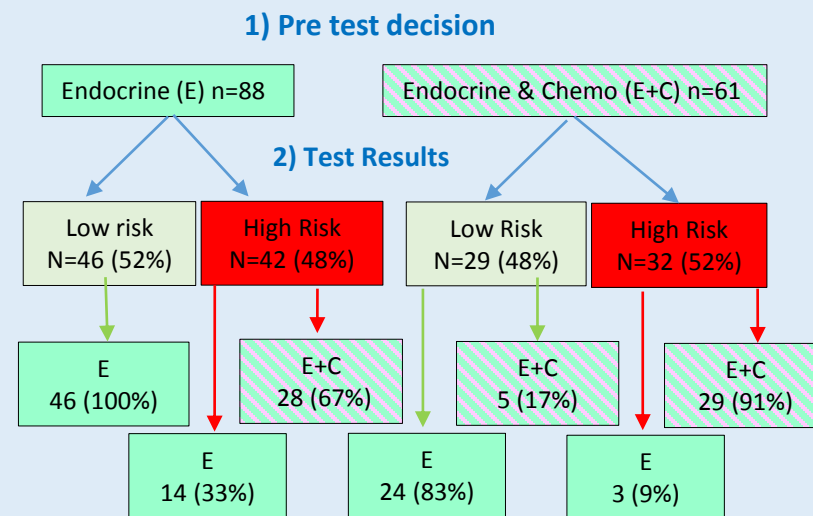
- Patients’ anxiety and decisional conflict
- Oncologists’ confidence about treatment decisions made (endocrine therapy +/- chemotherapy)

**Methods**

- Potential treatments discussed with patients based on usual prognostic factors
- Decisions recorded and doctors charted their confidence about these
- EndoPredict® test and study was explained
- Consenting patients completed Decisional Conflict Scale (DCS) and Spielberger state/trait anxiety inventory (STAI)
- Patients returned to discuss test results and completed further DCS and STAI
- Doctors recorded confidence about decisions

**Results:**

- 14 oncologists in 7 UK hospitals saw 149 eligible pts
- 27 patients saw different doctors at the 2<sup>nd</sup> visit



**Oncologists’ confidence:**

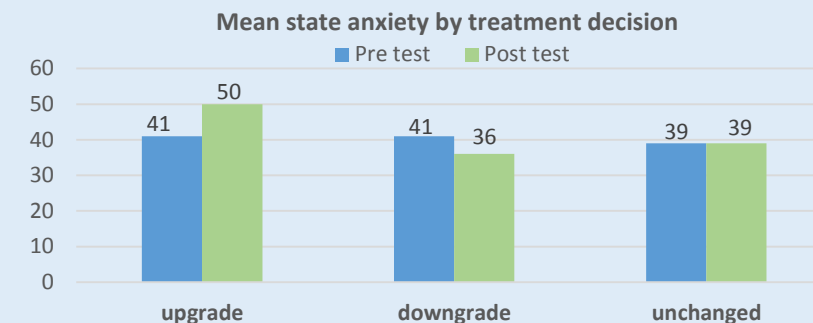
- Pre & post test oncologists rated their agreement with statement *“As the treating clinician, I am confident with the decision made today”*
- Those strongly agreeing increased significantly from pre to post test (8% v 50%) p=0.002



**Acknowledgements:** Patients, clinicians, nurses and Myriad Genetics

**Patients’ Anxiety:**

- Significantly lower when treatment downgraded to E (p=0.045) and higher when upgraded to E + C (p=0.001)



**Decisional conflict:**

- Post test patients felt significantly less uncertain, more informed and effective about decisions made and overall decisional conflict was reduced (p<0.025)

Categories (n)	Pre mean (sd)	Post mean (sd)
Uncertainty about options (144)	27.49 (27.40)	21.76 (23.18)*
Feeling uninformed (144)	16.15 (13.30)	12.67 (13.76)*
Feeling unclear (136)	16.12 (14.71)	14.22 (15.59)
Feeling unsupported (136)	12.07 (12.58)	10.85 (13.85)
Feeling ineffective (136)	17.69 (14.68)	13.01 (15.20)*
<b>Total conflict score</b>	<b>17.74 (13.59)</b>	<b>14.59 (14.26)*</b>

**Conclusions:**

- EndoPredict® testing generally improved the matching of therapy to risk, with the potential for better outcomes
- Test results increased oncologists’ confidence about treatment decisions
- Anxiety was lowered in patients whose treatment was downgraded
- Finally patients’ decisional conflict was significantly reduced