

Temporal Trends and Impact on Survival after Chemo-radiotherapy for Anal Cancer

A large single institute cohort over 25 years

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**Bowel Disease
Research Foundation**



The University of Manchester

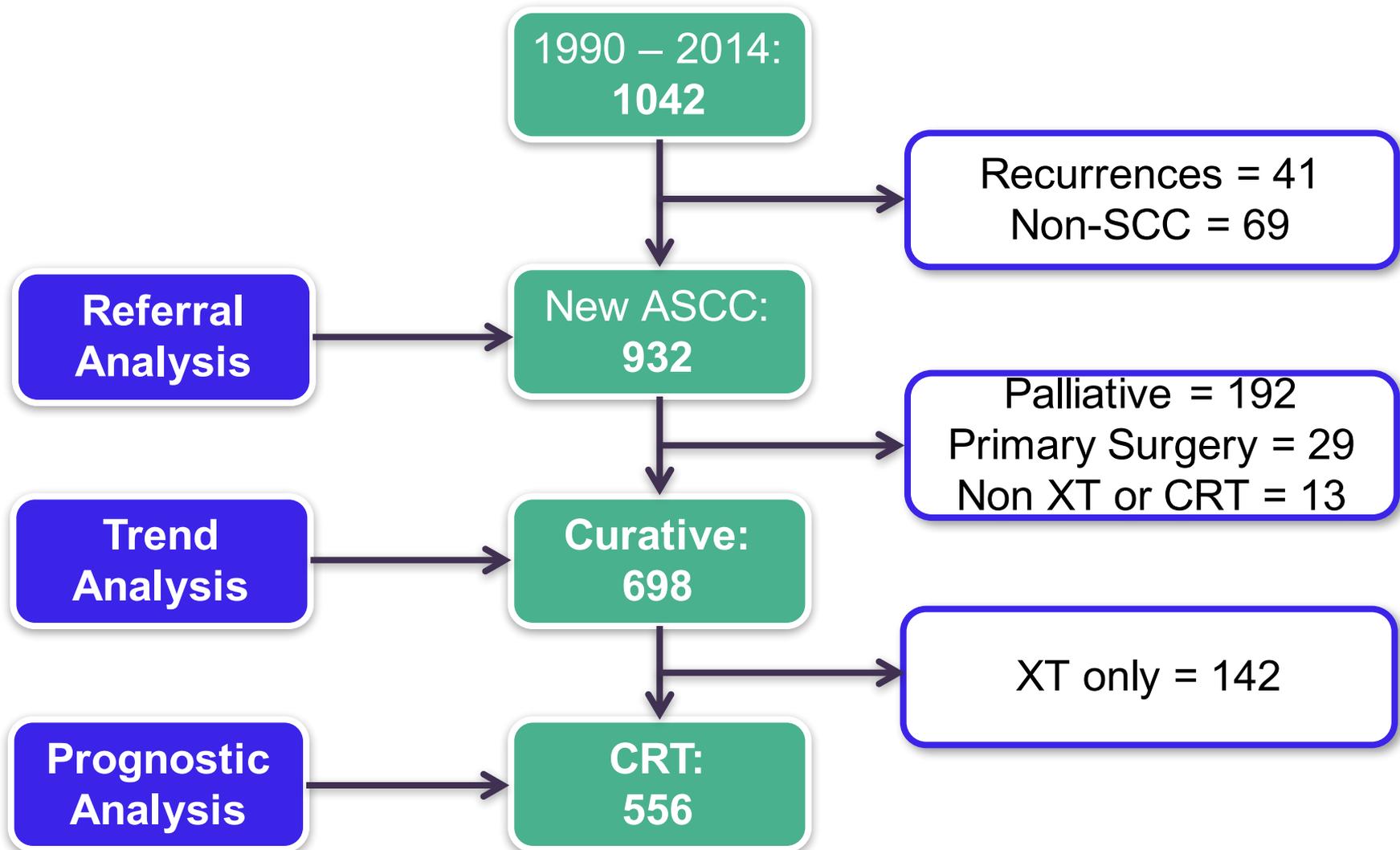
The Christie 
NHS Foundation Trust

Anal Cancer: over the past 25 years

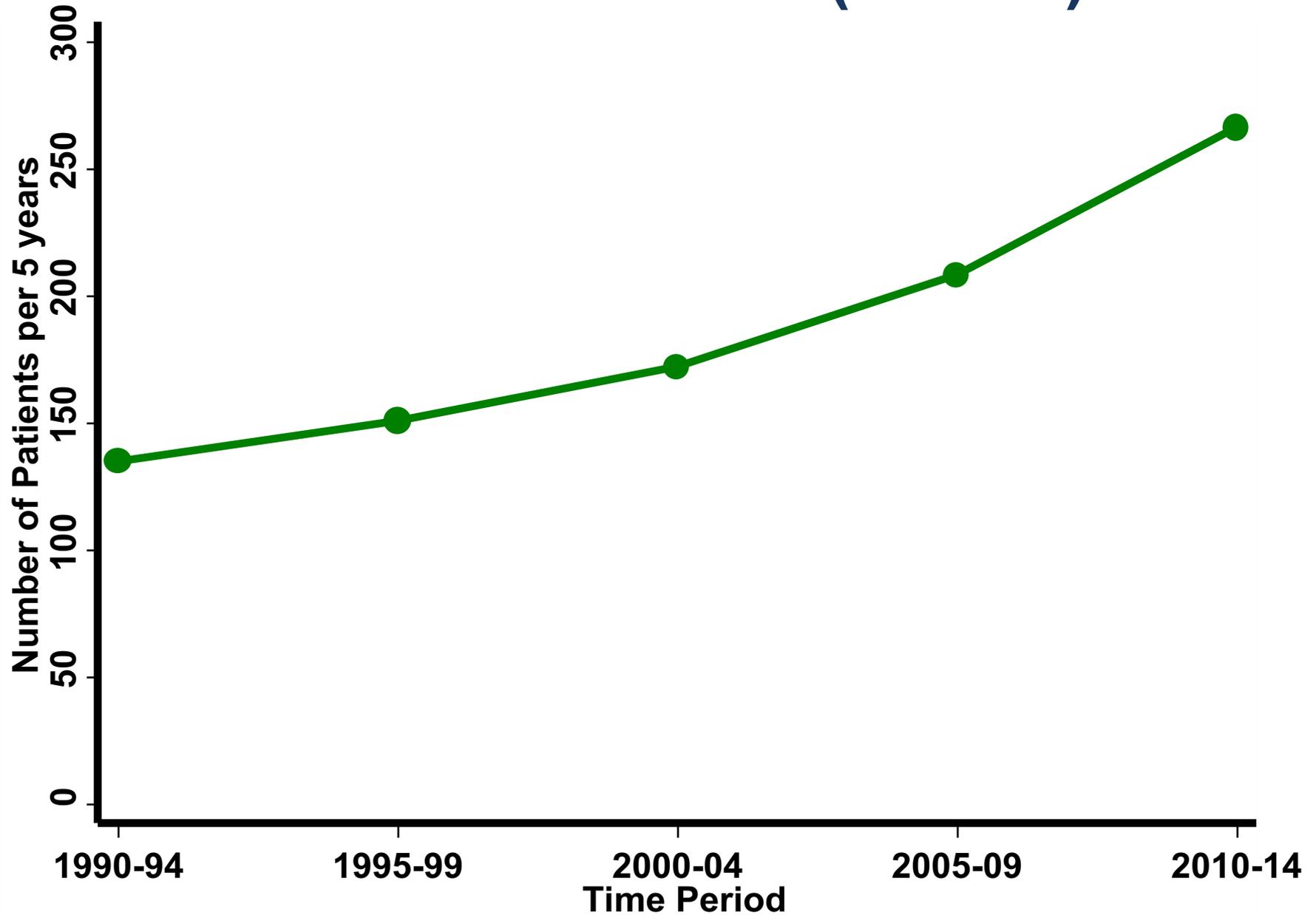
- Increasing incidence
- First line tx: chemo-radiotherapy (CRT)
- Enhanced pre-treatment staging: MRI & PET-CT

∴ Are these associated with improved outcome?

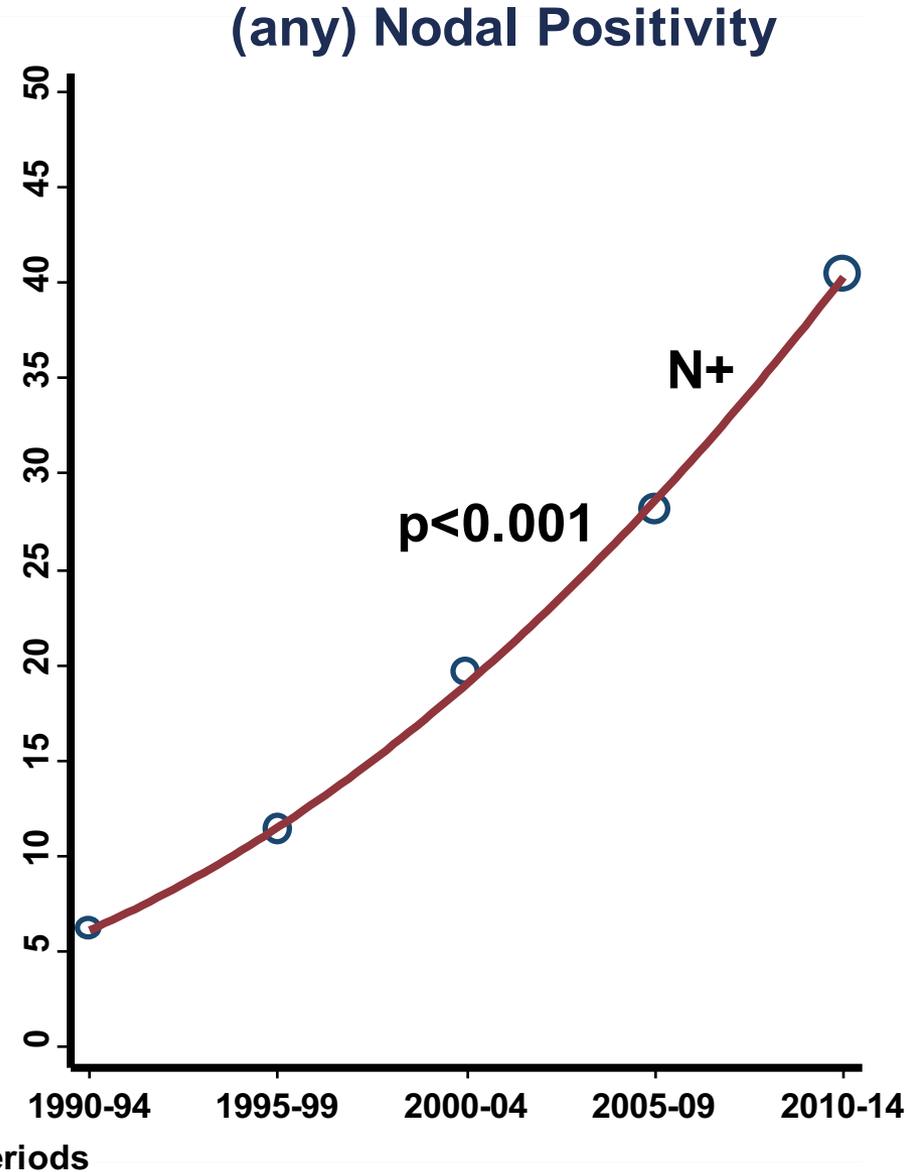
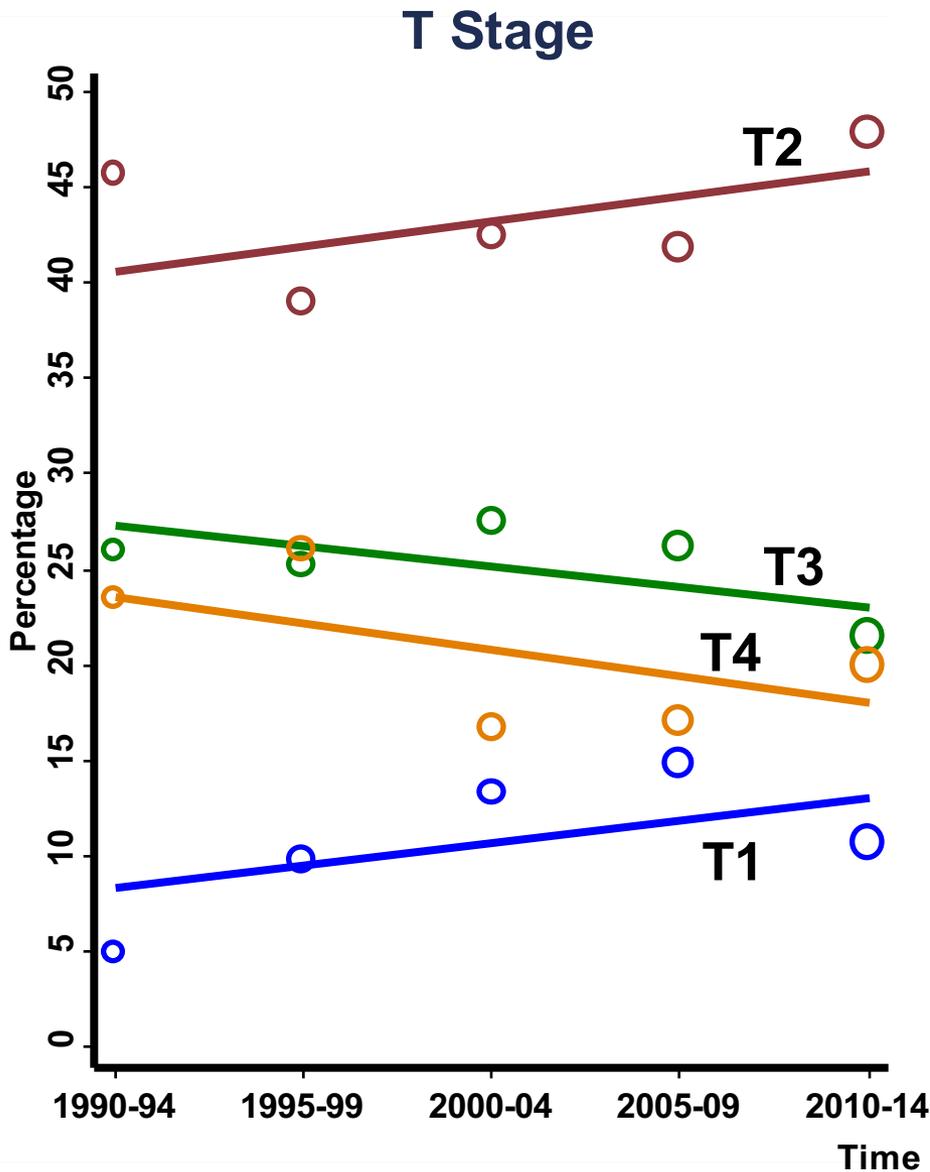
Methods



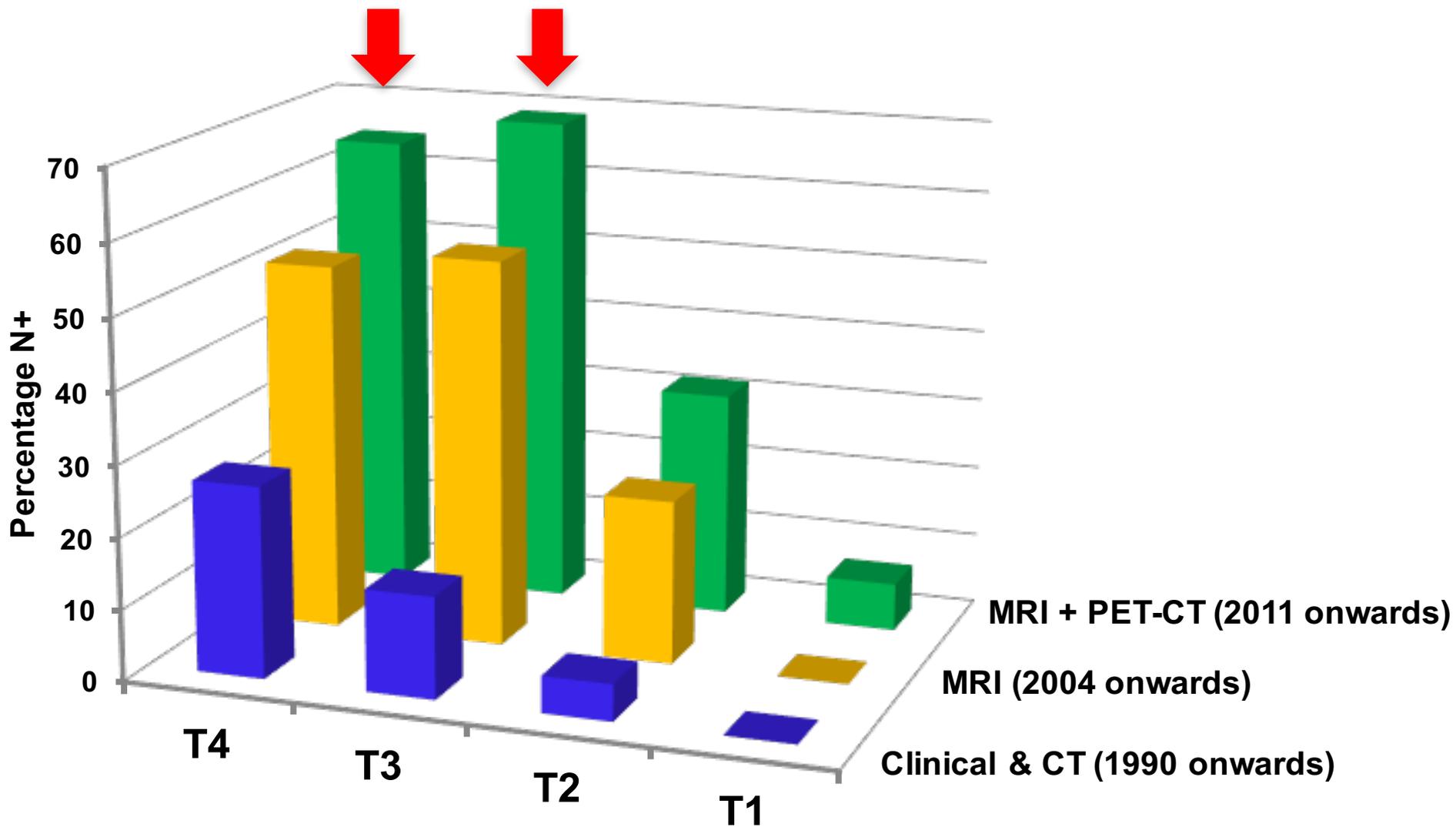
Referral Patterns (N: 932)



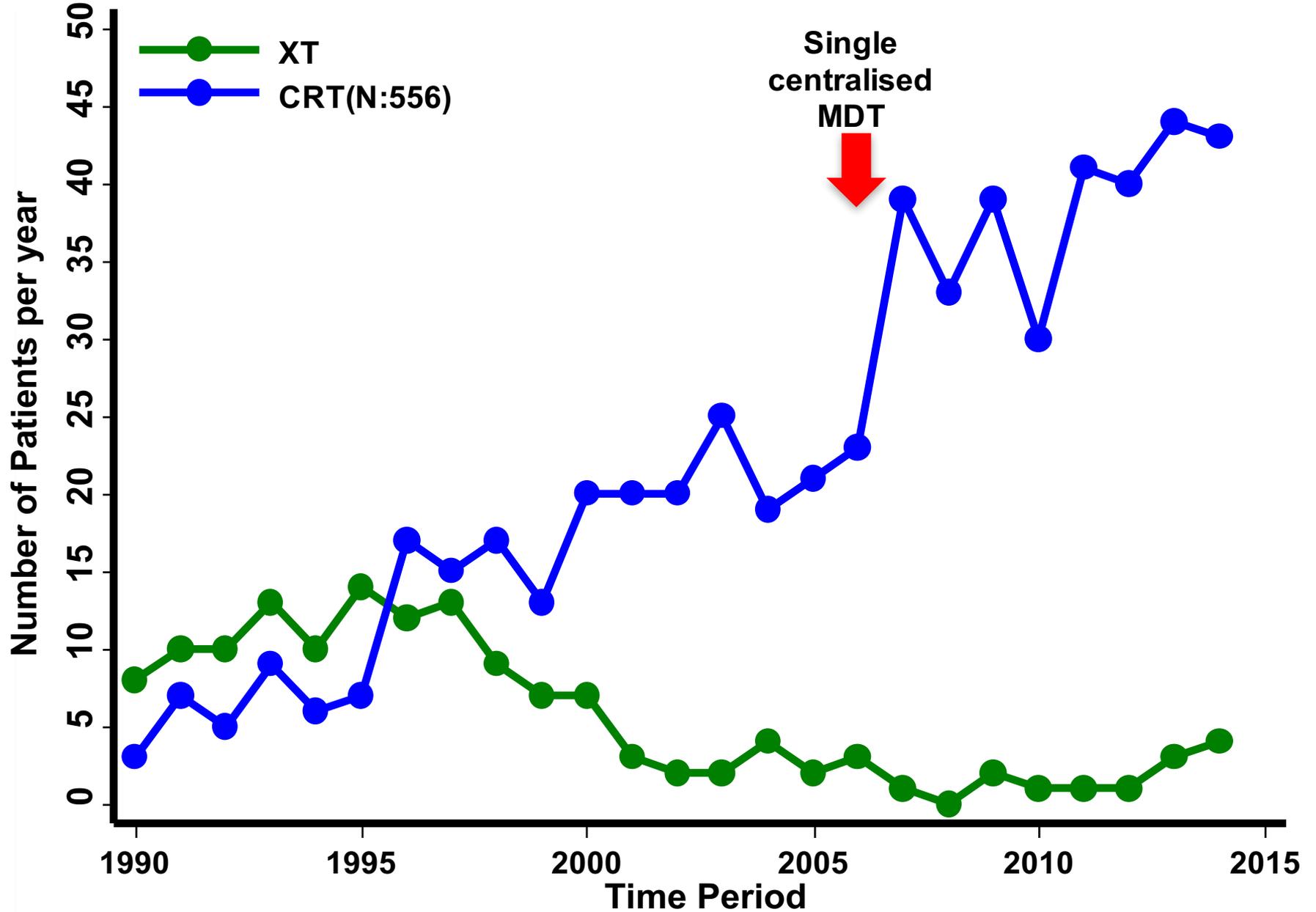
Presentation Patterns (N: 698)



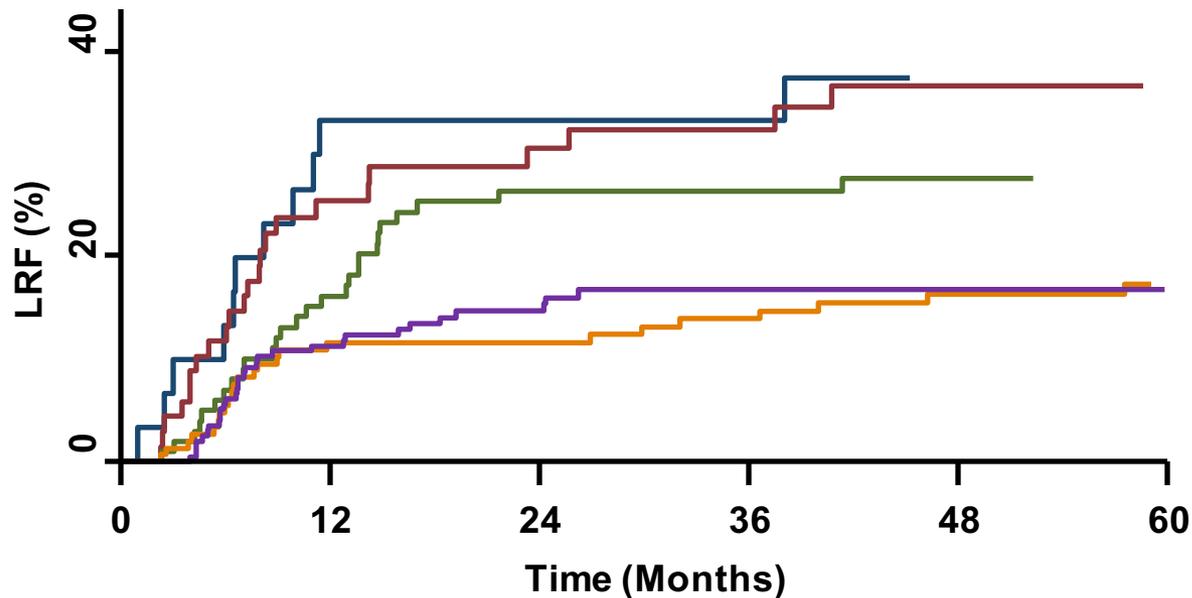
Any Nodal Detection (N: 698)



Treatment Patterns (N: 698)

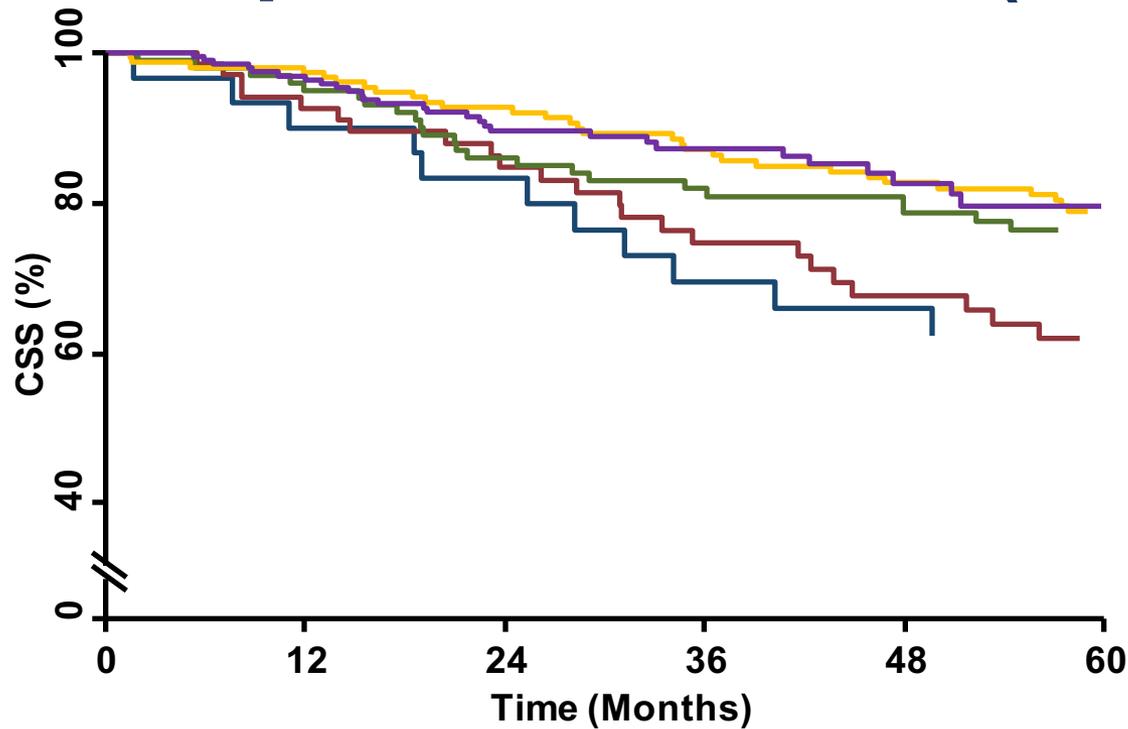


Locoregional Failure (N: 556)



Period	N	3yr LRF%	HR (CI)	P
1990:1994 █	30	33.3	2.37 (1.19:4.74)	0.014
1995:1999 █	68	32.5	2.34 (1.37:4.01)	0.002
2000:2004 █	104	26.4	1.68 (1.00:2.80)	0.048
2005:2009 █	152	13.8	0.99 (0.58:1.68)	0.965
2010:2014 █	198	16.7	1.00 (referent)	

Cancer Specific Survival (N: 556)



Period	N	5yr CSS %	HR (CI)	P
1990:1994 —	30	62.3	1.99 (1.01:3.81)	0.038
1995:1999 —	69	62.0	1.86 (1.08:3.19)	0.024
2000:2004 —	104	76.6	1.16 (0.68:1.99)	0.589
2005:2009 —	155	78.7	1.12 (0.68:1.85)	0.655
2010:2014 —	198	79.5	1.00 (referent)	

Summary Findings

1. Increasing referral numbers with time
2. Constant T stage proportions
3. Increasing N stage positivity (image driven)
4. Evidence of reduced LRF
5. Some evidence of improved CSS

Clinical Implications

- Quality standards for key contemporary outcomes for anal cancer
- Inform upcoming NCRI PLATO trial
- LRF remains a significant surgical burden (15% to 20%) post-CRT
- Future: unclear whether these are more treatment resistant/ biologically more aggressive