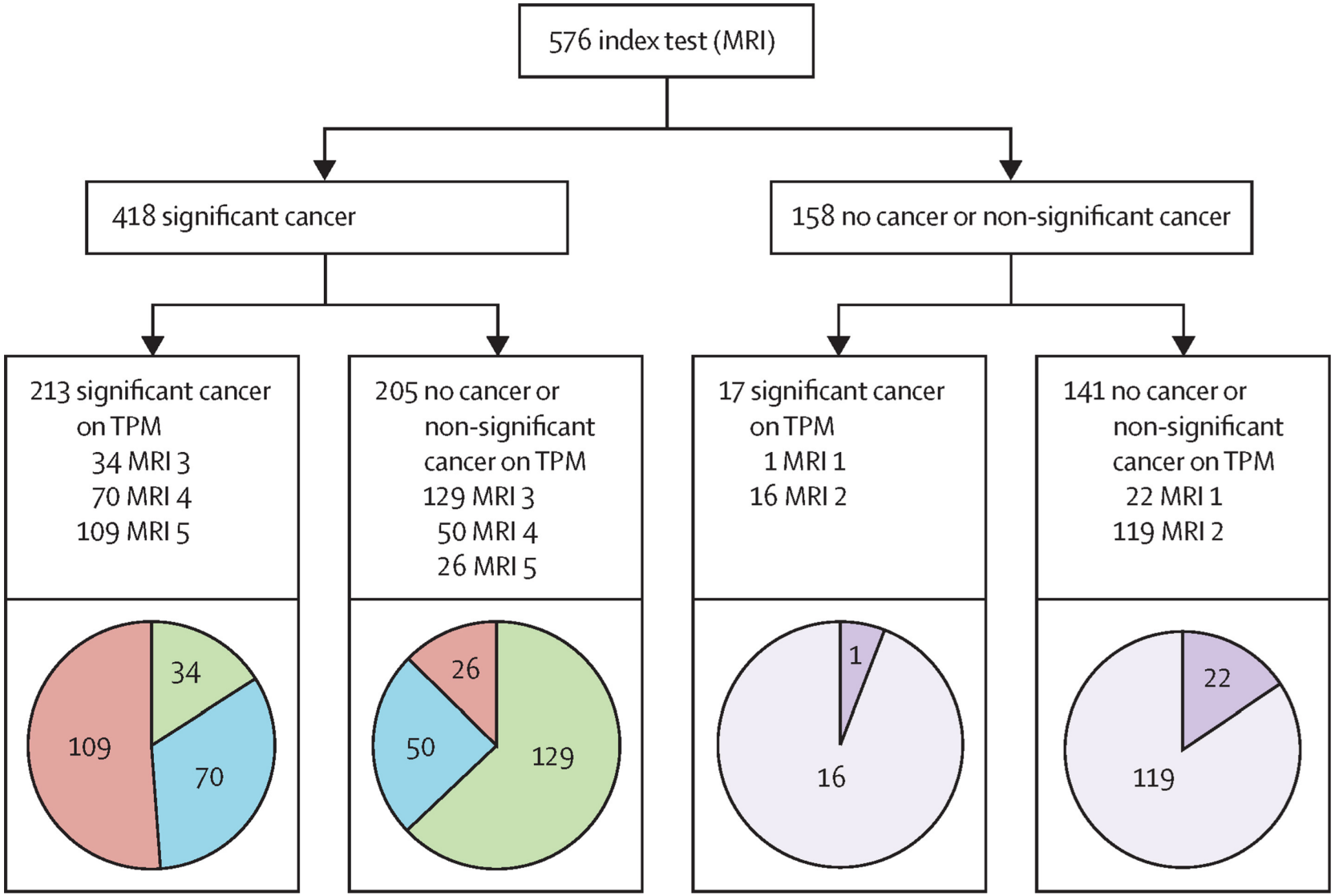
576 index test (MRI)
418 significant cancer
158 no cancer or non-significant cancer
213 significant cancer on TPM
34 MRI 3
70 MRI 4
109 MRI 5
205 no cancer or non-significant cancer on TPM
129 MRI 3
50 MRI 4
26 MRI 5
17 significant cancer on TPM
1 MRI 1
16 MRI 2
141 no cancer or non-significant cancer on TPM
22 MRI 1
119 MRI 2
34
109
70
26
50
129
1
16
22
119

	MP-MRI, % (95% CI)	TRUS-biopsy, % [95% CI]	Test ratio* [95% CI]	p value
Primary definition (Gleason score ≥4+3 or cancer core length ≥6 mm), prevalence of clinically significant cancer 230 (40%, 36–44%)				
Sensitivity test	93 (88–96)	48 (42–55)	0·52 (0·45–0·60)	p<0·0001
Specificity test	41 (36–46)	96 (94–98)	2·34 (2·08–2·68)	p<0·0001
PPV	51 (46–56)	90 (83–94)	8·2 (4·7–14·3)	p<0·0001
NPV	89 (83–94)	74 (69–78)	0·34 (0·21–0·55)	p<0·0001
Secondary definition (Gleason score ≥3+4 or cancer core length ≥4 mm), prevalence of clinically significant cancer 331 (57%, 53–62%)				
Sensitivity test	87 (83–90)	60 (55–65)	0·69 (0·64–0·76)	p<0·0001
Specificity test	47 (40–53)	98 (96–100)	2·11 (1·85–2·41)	p<0·0001
PPV	69 (64–73)	98 (95–100)	22·7 (8·6–59·9)	p<0·0001
NPV	72 (65–79)	65 (60–70)	0·70 (0·52–0·96)	p=0·025
Any Gleason score 7 (≥3+4), prevalence of clinically significant cancer 308 (53%, 49–58%)				
Sensitivity test	88 (84–91)	48 (43–54)	0·55 (0·49–0·62)	p<0·0001
Specificity test	45 (39–51)	99 (97–100)	2·22 (1·94–2·53)	p<0·0001
PPV	65 (60–69)	99 (95–100)	40·8 (10·2–162·8)	p<0·0001
NPV	76 (69–82)	63 (58–67)	0·53 (0·38–0·73)	p<0·0001

Pros

- MRI positivity is highly sensitive for presence of “significant” prostate cancer
  - Sensitivity depends on definition (lower for GGG2)
  - Not a test of MRI accuracy since no targeted biopsy
  - However, presence of significant cancer does correlate with higher MRI risk scores (5>4>3)
  - Might suggest that an abnormal MRI is a sign of cancer (field effect?) even if MRI lesion itself is not cancer
- Despite limitations, strong support that mpMRI can reduce biopsies by as much as 26%
- Transperineal mapping biopsies is a reasonable surrogate for whole mount radical prostatectomy (although not identical)