

Figure 1. Top panel left: Caseviewer 'Scan Preview' for slide with invasive carcinoma. The slide scanner identifies the edge of the coverslip (indicated by arrows) and scans tissue within its bounds. The dashed square indicates portion of tissue with tumor and adjacent margin falling outside the coverslip. Top panel right: Scanned image of area indicated by dashed square (3.1x magnification). Tissue outside the coverslip is excluded and black-inked margin is not present for evaluation. Bottom panel: WSI with 'Slide outline' function in Caseviewer turned on. Running red outline highlights areas at top and right of tissue edges excluded at scanning (indicated by arrows).

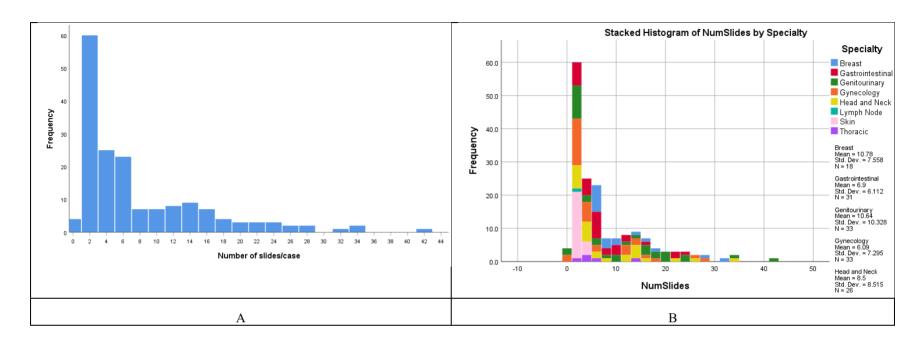


Figure 2(A-B): Distribution of number of slides per case (A) and the same shown as stacked histogram by subspecialty

			Pathologist					
		Pathologist 1	Pathologist 2	Pathologist 3	Pathologist 4	Pathologist 5	Total	
Any discrepancy (major or	Agree	29	31	23	28	32	143	
minor)	Minor Disagree	4	1	7	7	1	20	
	Major Disagree	2	1	2	2	1	8	
Total		35	33	32	37	34	171	

	Chi-Square Tests						
			Asymptotic Significance (2-				
	Value	df	sided)				
Pearson Chi-Square	11.214	8	0.190				
Likelihood Ratio	12.271	8	0.140				
N of Valid Cases	171						

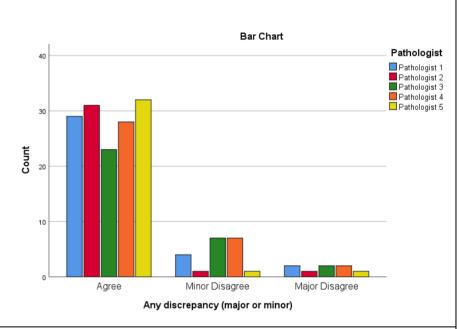


Figure 3: Top panel: Distribution of major and minor discrepancies among 5 study pathologists. Bottom left: No significant differences are identified between study pathologists (chi-square test). Bottom right; Bar graph depicting the same data

	_	Case Type		
		Small	Large	Total
Any discrepancy (major or minor)	Agree	104	39	143
	Minor Disagree	11	9	20
	Major Disagree	3	5	8
Total		118	53	171

Chi-Square Tests							
	<u>-</u>		Asymptotic				
			Significance (2-				
	Value	df	sided)				
Pearson Chi-Square	6.473	4	0.039				
Likelihood Ratio	6.023	2	0.049				
Linear-by-Linear Association	6.435		0.011				
N of Valid Cases	171						

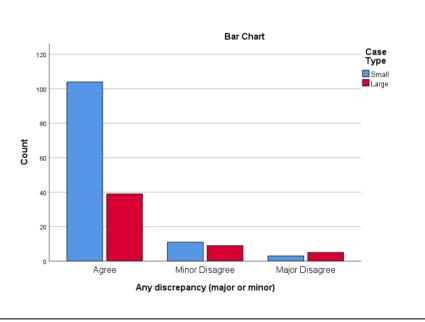


Figure 4: Top panel: Distribution of major and minor discrepancies between small and large case types. Bottom left: A small but significant difference is identified in the occurrence of major discrepancies in large case types compared to small (p=0.039, chi-square test). Bottom right; Bar graph depicting the same data.

		Any discrepancy (major or minor)			
		Agree	Minor Disagree	Major Disagree	Total
Specialty	Breast	13	4	2	19
	Gastrointestinal	22	7	2	31
	Genitourinary	29	2	2	33
	Gynecology	31	1	1	33
	Head and Neck	22	4	0	26
	Skin	22	2	0	24
	Thoracic	4	0	1	5
Total		143	20	8	171



	_	-	Asymptotic Significance (2-
	Value	df	sided)
Pearson Chi-Square	17.275	12	0.140
Likelihood Ratio	18.872	12	0.092
N of Valid Cases	171		

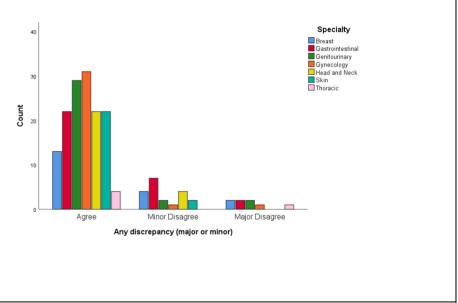


Figure 5: Top panel: Distribution of major and minor discrepancies among subspecialties. Bottom left: No significant differences are identified between study pathologists (chi-square test). Bottom right; Bar graph depicting the same data

			Pathologist					
		Pathologist 1	Pathologist 2	Pathologist 3	Pathologist 4	Pathologist 5	Total	
Major discrepancy	Agree	33	32	30	35	33	163	
	Disagree	2	1	2	2	1	8	
Total		35	33	32	37	34	171	

Chi-Square Tests						
			Asymptotic Significance (2-			
	Value	df	sided)			
Pearson Chi-Square	0.736	4	0.947			
Likelihood Ratio	0.774	4	0.942			
N of Valid Cases	171					

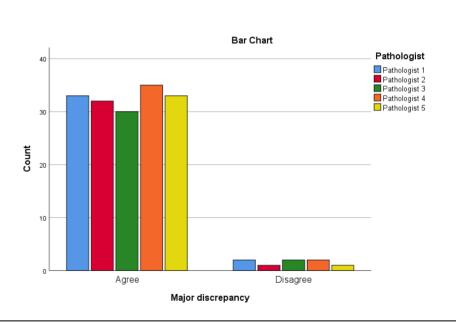


Figure 6: Top panel: Distribution of major discrepancies alone among 5 study pathologists. Bottom left: No significant differences are identified between study pathologists (chi-square test). Bottom right; Bar graph depicting the same data

		Case T	уре	
		Small	Large	Total
Major discrepancy	Agree	115	48	163
	Disagree	3	5	8
Total		118	53	171

			Asymptotic Significance (2-	Exact Sig. (2-
	Value	df	sided)	sided)
Pearson Chi-Square	3.895	1	0.048	
Continuity Correction	2.503	1	0.114	
Likelihood Ratio	3.539	1	0.060	
Fisher's Exact Test				0.109
Linear-by-Linear Association	3.872	1	0.049	
N of Valid Cases	171			

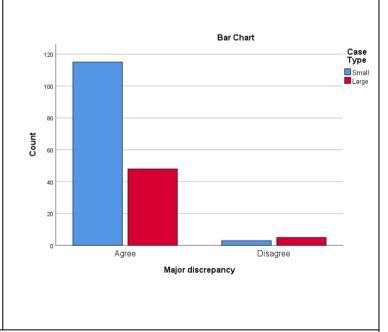


Figure 7: Top panel: Distribution of major discrepancies alone among small and large case types. Bottom left: A small but significant difference is identified in the occurrence of major discrepancies in large case types compared to small (p=0.048, chi-square test). Bottom right; Bar graph depicting the same data.

			Specialty						
		Breast	Gastrointestinal	Genitourinary	Gynecology	Head and Neck	Skin	Thoracic	Total
Major discrepancy	Agree	17	29	31	32	26	24	4	163
	Disagree	2	2	2	1	0	0	1	8
Total		19	31	33	33	26	24	5	171

Chi-Square Tests						
			Asymptotic			
			Significance (2-			
	Value	df	sided)			
Pearson Chi-Square	7.104	6	0.311			
Likelihood Ratio	7.941	6	0.242			
N of Valid Cases	171					

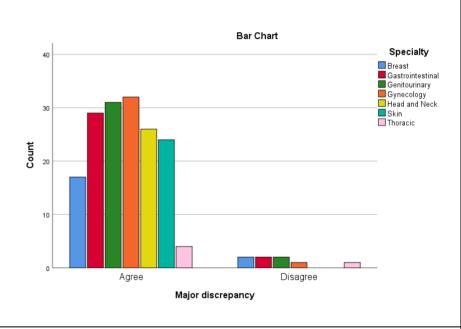


Figure 8: Top panel: Distribution of major discrepancies alone among subspecialties. Bottom left: No significant differences are identified between study pathologists (chi-square test). Bottom right; Bar graph depicting the same data