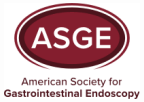
Polyp Surveillance Guidelines from the US and EU

Samir Gupta, MD, MSCS
Professor of Medicine, UC San Diego
Chief, GI Section, VA San Diego Healthcare System
s1gupta@health.ucsd.edu @samirguptaGI

Recommendations for Follow-Up After Colonoscopy and Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer

Samir Gupta,[1,2,3] David Lieberman,[4] Joseph C. Anderson,[5,6,7] Carol A. Burke,[8] Jason A. Dominitz,[9,10] Tonya Kaltenbach,[11,12] Douglas J. Robertson,[5,6] Aasma Shaukat,[13,14] Sapna Syngal,[15,16] and Douglas K. Rex[17]



Gastroenterology. 2020 Mar;158(4):1131-1153.e5.; Am J Gastroenterol. 2020 Mar;115(3):415-434.
Gastrointest Endosc. 2020 Mar;91(3):463-485.e5.

Guideline

Thieme

Post-polypectomy colonoscopy surveillance: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2020

ESGE

Authors
Cesare Hassan[1], Giulio Antonelli[1], Jean-Marc Dumonceau[2], Jaroslaw Regula[3], Michael Bretthauer[4], Stanislas Chaussade[5], Evelien Dekker[6], Monika Ferlitsch[7], Antonio Gimeno-Garcia[8], Rodrigo Jover[9], Mette Kalager[4], Maria Pellisé[10], Christian Pox[11], Luigi Ricciardiello[12], Matthew Rutter[13], Lise Mørkved Helsingen[4], Arne Bleijenberg[6], Carlo Senore[14], Jeanin E. van Hooft[6], Mario Dinis-Ribeiro[15], Enrique Quintero[8]

Objectives

- Identify key differences between US and EU polyp surveillance guidelines
- Discuss points of emphasis guiding differences

US vs ESGE: Conventional Adenomas

Baseline Colonoscopy Finding	USMSTF	ESGE
1 to 2 tubular adenomas < 10 mm	7 to 10 years	Return to screening*
3 to 4 tubular adenomas < 10 mm	3 to 5 years	Return to screening*
5 to 10 tubular adenomas < 10 mm	3 years	3 years
Adenoma ≥10mm	3 years	3 years
Adenoma with tubulovillous or villous histology	3 years	Return to screening if no other surveillance criteria met*
Adenoma with high grade dysplasia	3 years	3 years
>10 adenomas on single exam	1 year, consider genetic evaluation	Genetic evaluation

*colonoscopy ok if no organized screening program

US vs ESGE: Serrated Polyps

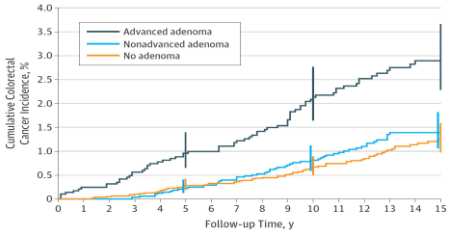
Baseline Colonoscopy Finding	USMSTF	ESGE
1 to 2 SSPs < 10 mm	5 to 10 years	Return to screening*
3 to 4 SSPs < 10 mm in size	3 to 5 years	Return to screening*
5 to 10 SSPs < 10 mm in size	3 years	No recommendation
SSP ≥ 10 mm	3 years	3 years
SSP with dysplasia	3 years	3 years
Hyperplastic polyp ≥ 10 mm	3 to 5 years[#]	3 years
Traditional serrated adenoma	3 years	3 years

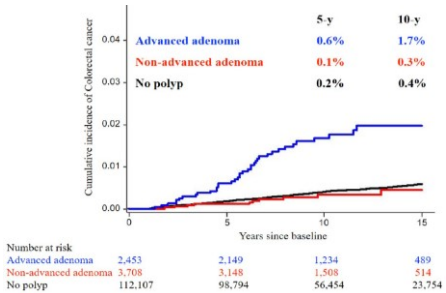
[#] A 3 year follow up interval is favored if concern about consistency in distinction between SSP and HP locally, bowel preparation, or complete excision, whereas a 5 year interval is favored if low concerns for consistency in distinction between SSP and HP locally, adequate bowel preparation, and confident complete excision.

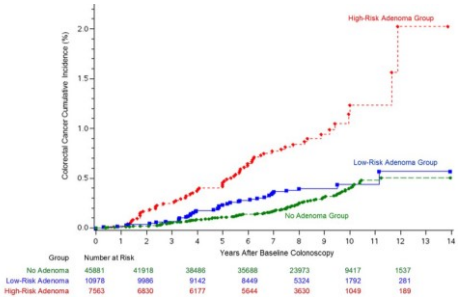
CRC incidence and mortality for low risk adenoma vs normal lower endoscopy*

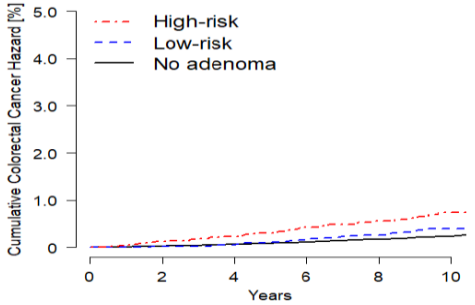
	Incidence				Mortality		
Baseline Finding	Click (n=15,935)	He (n=122,899)	Lee (n=64,422)	Wieszczy (n=236,089)	Click	Lee	Wieszczy
Normal	1.4%	0.4%	0.39%	0.24%#	--	0.07%	0.10%#
Low risk adenoma	1.2%	0.3%	0.44%	0.39%	--	0.03%	0.14%
Hazard Ratio (95% CI)	1.2 (0.8-1.7)	1.23 (0.65-2.31)	1.29 (0.89-1.88)	1.49 (1.13-1.98)	1.2 (0.5-2.7)	0.65 (0.19-2.18)	1.48 (0.88-2.46)

*incidence shown at 10 years for He/Lee/Wieszczy, and at 15 years for Click; #cumulative hazard; data retrieved through personal correspondence









Click JAMA 2018

He Gastro 2020

Lee JK Gastro 2020

Wieszczy Gastro 2020

Points of emphasis: return to screening vs 7-10 yr colonoscopy

- ESGE:
  - Lower CRC incidence and mortality compared with general population
  - Similar CRC incidence compared with normal colonoscopy
  - Interpretation that studies show benefit of surveillance has been excluded
- USMSTF:
  - Uncertainty regarding role of surveillance

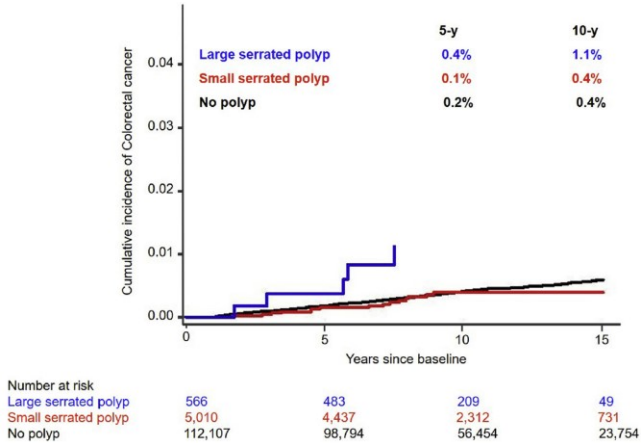
Cumulative colonoscopy exposure by baseline finding		
Study	**No Adenoma**	**1-2 adenomas < 10 mm**
He Gastro 2020	42% by 6 years 54% by 10 years	73% by 6 years 77% by 10 years
Lee Gastro 2020	9.3% at 6 years 19.8% at 10 years	40.5% at 6 years 58.8% at 10 years
Click JAMA 2018	36.9% at 5 years 69.9% at 9 years	53.0% at 5 years 78.1% at 9 years

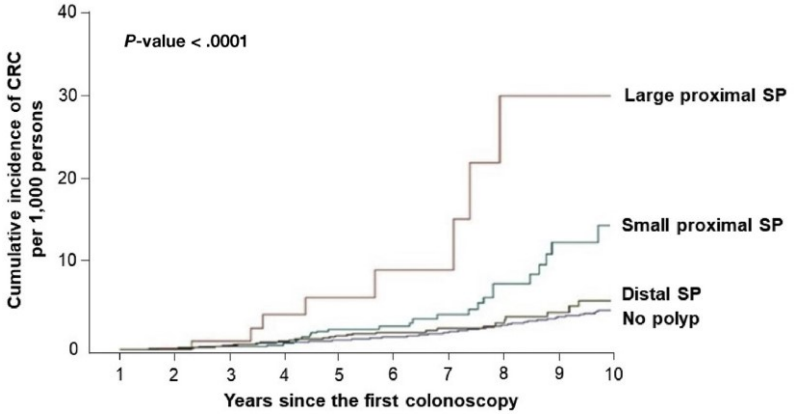
  - Patient risk and practice disruption

Risk for CRC associated with serrated polyps vs normal lower endoscopy

Study	Baseline Small Serrated Polyp*		Baseline Large Serrated Polyp (≥10mm)		Baseline Serrated Polyp & Conventional Adenoma	
	n	HR (95% CI)	n	HR (95% CI)	n	HR (95% CI)
He Gastro 2020 (no polyp, n=112,107)	5010	0.93 (0.56–1.53)	566	2.82 (1.16–6.82)	1287	2.06 (1.12–3.75)
Li Gastro 2020 (no polyp, n=173,257)	6,639	2.6 (1.7-3.9)**	793	8.0 (3.9-16.1)**	29,221	3.1 (2.4-4.0)

*For He, small serrated polyp included HP, SSP, TSA; for Li, data shown are for proximal small serrated polyps (HP, SP, TSA); **risk is based on patients with >=3 years f/u time





Points of emphasis: No surveillance vs surveillance for SSPs<1cm

- ESGE:
  - Lack of evidence for importance of serrated lesions <1cm
- USMSTF:
  - Suspicion that small proximal serrated polyps may confer CRC risk
  - Increased risk for large serrated polyps among patients with SSPs
  - Recognition of both sparsity of data a need to provide guidance

Risk for high risk adenoma and large SP stratified by baseline colonoscopy findings in the New Hampshire Colonoscopy Registry (n=5,433) Anderson JC Gastroenterology 2018;154:117-127 e2

Baseline Finding	Surveillance Colonoscopy Finding	
	High Risk Adenoma, % (n)	Serrated Polyp ≥10 mm, % (n)
No adenoma	4.8 (116/2396)	0.7 (18/2396)
Low risk adenoma**	9.7 (96/991)	0.5 (5/991)
High risk adenoma	18.2 (11/603)	1.0 (6/603)
Low risk adenoma + SSP**	18.4 (9/49)	8.2 (4/49)
High risk adenoma+ SSP	46.4 (13/28)	3.6 (1/28)
SSP or TSA	2.9 (3/104)	9.6 (10/104)
Serrated polyp ≥10 mm	3.1 (2/65)	12.3 (8/65)

Low risk adenoma = 1 to 2 adenomas < 10mm; High risk adenoma = advanced adenoma or > 2 adenomas; Serrated polyp = SSP, traditional serrated adenoma, or hyperplastic polyp

Summary

- USMSTF and ESGE recommendations share many similarities
  - Downgrading 1-4 adenomas <10 mm
- Differences are mainly attributable to:
  - Reaction to lack of data
  - Approach to weighing strengths and weaknesses of available studies

Thank you!