## Colorectal Cancer (CRC) Screening and Surveillance

### Patient Group

## **Colonoscopy Interval**

## Average Risk <sup>1</sup>

CRC Screening

 <u>Routine</u> screening not recommended beyond age 75 y.o. or if life expectancy is < 10 years</li>

 Screen age 76-85 <u>if never previously</u> <u>screened</u> and life expectancy is ≥ 10 years)

• HP < 10 mm (<u>considered non-neoplastic</u>)

Begin at age 45 - If screening exam is normal<sup>2</sup>, patient is  $\leq$  75 y.o., and life expectancy is  $\geq$  10 years, repeat colonoscopy in 10 yrs.

10 year

## Increased Risk (personal history of neoplastic/precancerous polyps)<sup>3</sup>

1 or 2 TAs < 10 mm
 <p>(If no TAs at 5 year follow-up, go to 10 year surveillance interval)

1 or 2 SSLs < 10 mm

• 3 or 4 TAs or SSLs

• 5-10 TAs or SSLs

• > 10 TAs

SPS<sup>‡</sup>

Advanced adenoma or serrated lesion<sup>†</sup>

• HP ≥ 10 mm

Piecemeal resection of adenoma or SSL ≥ 20 mm

7-10 year

5-10 year

3-5 year

3 year

1 year

1 year

3 year

3-5 year

6 months

# Increased Risk (family history in the absence of a hereditary syndrome)

Single 1<sup>st</sup> degree relative < 60 y.o. or in
 ≥ Two 1<sup>st</sup> degree relatives of any age with
 CRC or clear documentation of an advanced
 adenoma or advanced serrated lesion <sup>§,†</sup>

 Single 1<sup>st</sup> degree relative ≥ 60 y.o. with CRC or <u>clear documentation</u> of an advanced adenoma or advanced serrated lesion

 2<sup>nd</sup>/3<sup>rd</sup> degree relatives of any age with CRC, an advanced adenoma, or advanced serrated lesion Begin at age 40 **or** 10 years younger than the age at which the youngest affected relative was diagnosed, whichever is earlier - 5 yr. interval thereafter unless colonoscopy findings dictate a shorter interval

Begin at age 40 - 10 yr. interval thereafter unless colonoscopy findings dictate a shorter interval

Begin at age 45 (screen as average risk individuals)

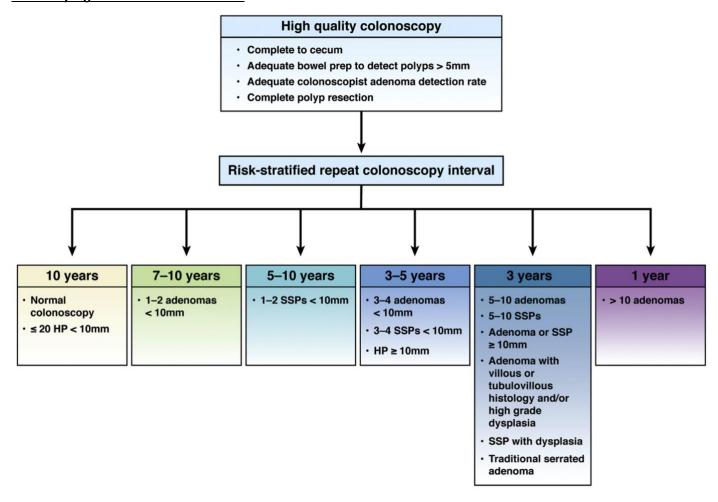
Prosser Memorial Digestive Health Center

<sup>&</sup>lt;sup>1</sup> <u>Average risk for CRC</u>: Absence of inflammatory bowel disease, family history of CRC, hereditary syndrome associated with increased risk, serrated polyposis syndrome, personal history of CRC.

 $<sup>^{2}</sup>$  Normal colonoscopy: A colonoscopy where no adenoma, SSP, TSA, HP ≥ 10 mm, or CRC is found.

<sup>&</sup>lt;sup>3</sup> <u>Abbreviations</u>: TA – tubular adenoma (non-advanced), SSL – sessile serrated lesion (non-advanced), TSA – traditional serrated lesion, HP – hyperplastic polyp, SPS – serrated polyposis syndrome.

## **Summary Figure of Recommendations:**



Overall success of colorectal cancer screening – "United States has achieved the world's highest rates of CRC screening compliance at 60% and the greatest CRC incidence and mortality reduction ... Incidence reductions in the United States were 3% to 4% per year and 30% overall in the first decade of this century."

<u>Precursor lesions of CRC</u> – Adenomas are precursors of 75-80% of all CRCs. Sessile serrated lesions (SSLs) are precursors of up to 20-25% of all CRCs.

<u>Tier 1 tests for colorectal cancer screening in average risk individuals</u> — Colonoscopy and FIT testing. Colonoscopy is a <u>colon cancer prevention test</u>. FIT is primarily a test to <u>detect CRC</u> and to a lesser extent advanced neoplastic polyps, lesions which tend to bleed. Colonoscopy is better at finding polyps before they become cancer. Therefore, many experts believe that finding polyps before they become cancer should make colonoscopy better at preventing death from colon cancer. FIT testing is inferior for detecting advanced SSLs as compared to advanced adenomas, because advanced SSLs tend to bleed less than advanced adenomas. <u>FIT testing is an overall good screening method as long</u> as it is done yearly.

§ Clear documentation of an advanced adenoma or advanced serrated lesion — It is not recommended "that persons with a family history of adenomas in a first-degree relative undergo early screening, unless there is <u>clear documentation</u> of an <u>advanced</u> adenoma in a first-degree relative. In most cases, the patient has no information regarding whether the family member's adenoma was advanced, and in this case we recommend that it be assumed the adenomas or polyps were not advanced. If a colonoscopy and/or pathology report(s) is available for a family

member that documents an advanced adenoma or there is a report of a polyp requiring surgical resection, an advanced adenoma in a family member is considered established. These considerations regarding adequate documentation of advanced precancerous neoplasms in first-degree relatives before intensifying screening apply to documentation of both advanced adenomas and advanced serrated lesions."

## † Definitions of Advanced Lesions:

- Advanced adenoma defined as meeting any of the following criteria:
  - o Adenoma size ≥ 10 mm in size, or
  - Adenoma with villous components, or
  - Adenoma with high grade dysplasia
- Advanced serrated lesion defined as meeting any of the following criteria:
  - SSLs ≥ 10 mm in size, or
  - SSL with cytologic dysplasia, or
  - Traditional serrated adenoma ≥ 10 mm in size

## **‡ Serrated Polyposis Syndrome (World Health Organization Criteria):**

- I.  $\geq$  5 serrated polyps proximal to the sigmoid, with  $\geq$  2 being  $\geq$  10 mm;
- II.  $\geq$  20 serrated polyps of any size, distributed throughout the colon, **OR**;
- III. any serrated polyps proximal to the sigmoid in an individual who has a 1st degree relative with SPS.

Note that any histologic subtype of serrated lesion/polyp (hyperplastic polyp, sessile serrated lesion with or without dysplasia, traditional serrated adenoma, and unclassified serrated adenoma) is included in the final polyp count.

#### References:

- 1. Patel SG, et al. Updates on Age to Start and Stop Colorectal Cancer Screening: Recommendations From the U.S. Multi-Society Task Force on Colorectal Cancer. Gastroenterology. 2022;**162**:285-299.
- 2. US Preventive Services Task Force Recommendation Statement: Screening for Colorectal Cancer. *JAMA*. 2021;**325:**1965-1977.
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- 4. Sehgal M, et al. Colorectal Cancer Incidence After Colonoscopy at Ages 45–49 or 50–54 Years. *Gastroenterology*. 2021;**160**:2018–2028.
- 5. Gupta S, et al. Recommendations for Follow-Up After Colonoscopy and Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer. *Gastroenterology*. 2020;**158**:1131-1153.
- 6. Rex DK, et al. Colorectal Cancer Screening: Recommendations for Physicians and Patients From the U.S. Multi-Society Task Force on Colorectal Cancer. *Gastroenterology*. 2017;**153**:307-323.
- 7. Lieberman DA, et al. Guidelines for Colonoscopy Surveillance After Screening and Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer. *Gastroenterology*. 2012;**143**:844–857.