



**STAGE OF COLORECTAL CANCER IS NOT
ASSOCIATED WITH TIME SINCE LAST
COLONOSCOPY IN LYNCH SYNDROME**

**TONI SEPPÄLÄ
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**MD, PHD, COLORECTAL SURGEON
AUCKLAND, NEW ZEALAND (INSIGHT)**

BACKGROUND

- Benefits of 1–2 -yearly colonoscopy for Lynch Syndrome carriers have not been clearly demonstrated over 3-yearly colonoscopies
- Surveillance strategies with **short intervals did not reduce** colorectal cancer **incidence or mortality** in 3-Country Study or PLSD reports

Are short intervals between colonoscopies before CRC diagnosis associated with earlier stages?

METHODS

- 6,350 patients were under colonoscopy surveillance for 51,646 prospective follow-up years
- Only Insight class 4 & 5 variant carriers were included
- CRCs within one year after first planned colonoscopy were excluded as prevalent cancers
- Time since previous colonoscopy to CRC diagnosis was compared to AJCC stage of the cancer



CONTRIBUTORS

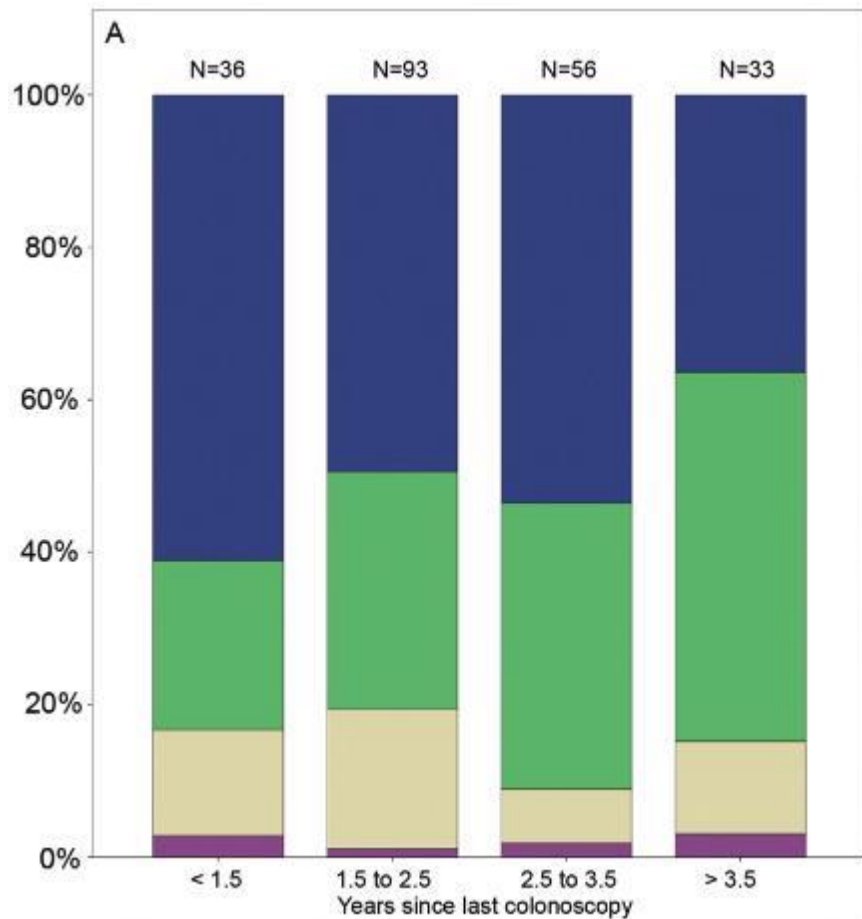
Country	Recommended interval
Finland	3 years
Norway	2 years
Sweden	1.5 years
Denmark	2 years
Netherlands	2 years
UK	2 years
Spain	1–2 years
Australia	1 year

- Contributors from 8 countries provided the exact time since previous colonoscopy and the AJCC stage for the study
- 218 out of 707 (31%) prospective CRCs had complete information

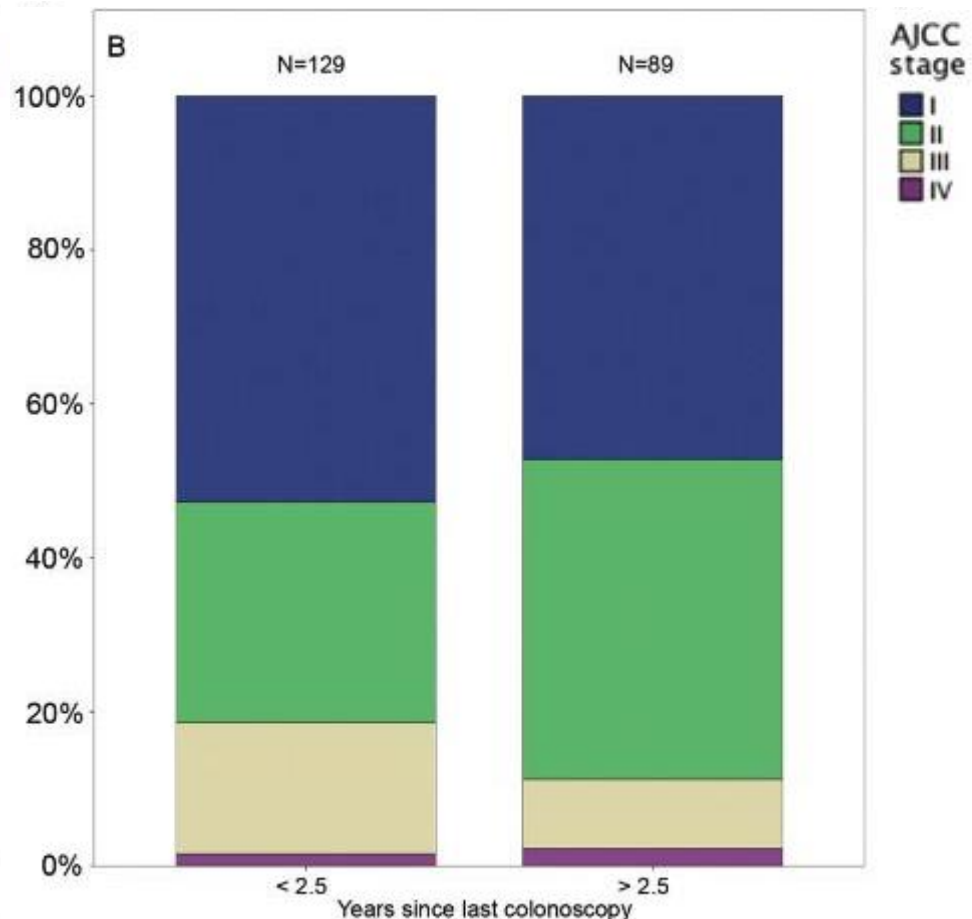
Gene	N
<i>MLH1</i>	162
<i>MSH2</i>	45
<i>MSH6</i>	10
<i>PMS2</i>	1

	Less than 1.5 years (%)	1.5 to 2.5 years (%)	2.5 to 3.5 years (%)	Over 3.5 years (%)
Stage I	22 (61.1)	46 (49.5)	30 (53.6)	12 (36.4)
Stage II	8 (22.2)	29 (31.2)	21 (37.5)	16 (48.5)
Stage III	5 (13.9)	17 (18.3)	4 (7.1)	4 (12.1)
Stage IV	1 (2.8)	1 (1.1)	1 (1.8)	1 (1.8)
All stages	36 (100)	93 (100)	56 (100)	33 (100)

- Mean age at cancer was 55 years
- Colonoscopy interval distribution was the same for those < 55 and > 55 years old
- Adenoma was removed at previous colonoscopy in 20.8%



$p=0.40$



$p=0.14$

- Stage distribution did not differ between interval groups
- Short intervals did not result with earlier stages
- Advanced stages were not associated with long intervals

CONCLUSIONS

- This is the second study showing no stage benefit of short colonoscopy intervals
- Annual colonoscopy does not provide stage, incidence or survival benefit compared to less frequent strategy
- There is controlled evidence that 3-yearly colonoscopy reduces incidence and mortality compared to no surveillance
 - ➔ Aggressive CRCs are detected and treated successfully by any strategy
 - ➔ Frequent colonoscopy detects very early cancer that does not spread by longer intervals
 - ➔ Over-diagnosis may explain the lack of benefit of short intervals

RESEARCH

Open Access

Lack of association between screening interval and cancer stage in Lynch syndrome may be accounted for by over-diagnosis; a prospective Lynch syndrome database report



Toni T. Seppälä^{1,2*}, Aysel Ahadova³, Mev Dominguez-Valentin^{4,5}, Finlay Macrae^{6,7}, D. Gareth Evans⁸, Christina Therkildsen⁹, Julian Sampson¹⁰, Rodney Scott¹¹, John Burn¹², Gabriela Möselein¹³, Inge Bernstein¹⁴, Elke Holinski-Feder^{15,16}, Kirsi Pylvänäinen¹⁷, Laura Renkonen-Sinisalo³, Anna Lepistö¹, Charlotte Kvist Lautrup¹⁸, Annika Lindblom¹⁹, John-Paul Plazzer⁶, Ingrid Winship^{6,7}, Douglas Tjandra⁶, Lior H. Katz²⁰, Stefan Aretz²¹, Robert Hüneburg^{22,23}, Stefanie Holzapfel^{22,23}, Karl Heinemann²⁴, Adriana Della Valle²⁵, Florencia Neffa²⁵, Nathan Gluck²⁶, Wouter H. de Vos tot Nederveen Cappel²⁷, Hans Vasen²⁸, Monika Morak^{15,16}, Verena Steinke-Lange^{15,16}, Christoph Engel²⁹, Nils Rahner³⁰, Wolff Schmiegel³¹, Deepak Vangala³¹, Huw Thomas³², Kate Green⁹, Fiona Laloo⁹, Emma J. Crosbie³³, James Hill⁹, Gabriel Capella^{34,35}, Marta Pineda^{34,35}, Matilde Navarro^{34,35}, Ignacio Blanco^{34,35}, Sanne ten Broeke³⁶, Maartje Nielsen³⁷, Ken Ljungmann³⁸, Sigve Nakken⁴, Noralane Lindor³⁹, Ian Frayling¹⁰, Eivind Hovig^{4,40}, Lone Sunde⁴¹, Matthias Kloor³, Jukka-Pekka Mecklin^{42,43}, Mette Kalager^{44,45} and Pål Møller^{4,13,5}

Presented @ InSiGHT 2019 on behalf of:

Lone Sunde, Inge Bernstein, Mev Dominguez-Valentin, Christina Therkildsen, Kirsi Pylvänäinen, Laura Renkonen-Sinisalo, Anna Lepistö, Charlotte Kvist Lautrup, Finlay Macrae, Gareth Evans, Annika Lindblom, Gabriel Capella, John-Paul Plazzer, Kate Green, Fiona Laloo, Emma Crosbie, James Hill, Marta Pineda, Matilde Navarro, Ignacio Blanco, Sanne ten Broeke, Maartje Nielsen, Ken Ljungmann, Sigve Nakken, Eivind Hovig, Jukka-Pekka Mecklin and Pål Møller

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PLSD

The Prospective Lynch Syndrome Database



HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

LÄÄKETIETEELLINEN TIEDEKUNTA
MEDICINSKA FAKULTETEN
FACULTY OF MEDICINE



European Hereditary
Tumour Group

EMIL AALTOSEN SÄÄTIÖ



@Adductor
@Lynch_Fi

toni.seppala@fimnet.fi