



European Polyp Surveillance (EPoS)

WEO meeting May 19th 2022

EWG Surveillance after colonic neoplasm

San Diego



HYPOTHESIS

- There are no differences in the incidence of cancer or in the rate of advanced adenomas or CRC if surveillance colonoscopy after excision of adenomas is performed at longer intervals than recommended
 - 10 years for low-risk adenomas
 - 5 years for high risk adenomas

OBJECTIVE

- **EPoS I:** To compare incidence of CRC and rate of advanced neoplasia at 5 y vs at 10 y after baseline colonoscopy in patients with low risk adenomas
- **EPoS II:** To compare incidence of CRC and rate of advanced neoplasia at 3 y vs at 5 y after baseline colonoscopy in patients with high risk adenoma
- **EPoS III:** observational study of risk of advanced neoplasia after serrated polyps excision

TRIAL ENDPOINTS

- PRIMARY ENDPOINT
 - The primary endpoint is CRC incidence
- SECONDARY ENDPOINTS
 - Adenoma and polyp yield
 - Colorectal cancer mortality
 - Cost-effectiveness
 - Adverse events

METHODS

INCLUSION CRITERIA

- ❖ Baseline colonoscopy, 40-74 years
- ❖ Cecal Intubation
- ❖ Adequate colonic cleansing (Boston ≥ 2 in all colonic segments)
- ❖ Complete excision of all polyps (as judged by endoscopists)
- ❖ Randomization < 26 weeks from baseline colonoscopy

METHODS

EXCLUSION CRITERIA

- ✓ Lack of consent
- ✓ History of CRC or adenomas
- ✓ History of serrated polyps ≥ 10 mm or ≥ 5 mm if proximal to splenic flexure
- ✓ More than 10 adenomas
- ✓ Incomplete colonoscopy
- ✓ Incomplete excision of polyps
- ✓ Genetic cancer syndrome (adenomatous or serrated polyposis; Lynch or Lynch-like syndrome)
- ✓ Inflammatory bowel disease
- ✓ History of surgical colon resections for any reason
- ✓ Severe co-morbidity with reduced life expectancy (NYHA 3-4)
- ✓ On-going cytotoxic treatment or radiotherapy for malignant disease
- ✓ Long-lasting attention and nursing services (somatic or psychosocial, mental retardation).

EPoS trials

- **EPoS I**

- 1-2 tubular adenomas < 10 mm with low grade dysplasia

- **EPoS II**

- 3-10 adenomas
- One or more ≥ 10 mm
- One or more with high grade dysplasia or villous component

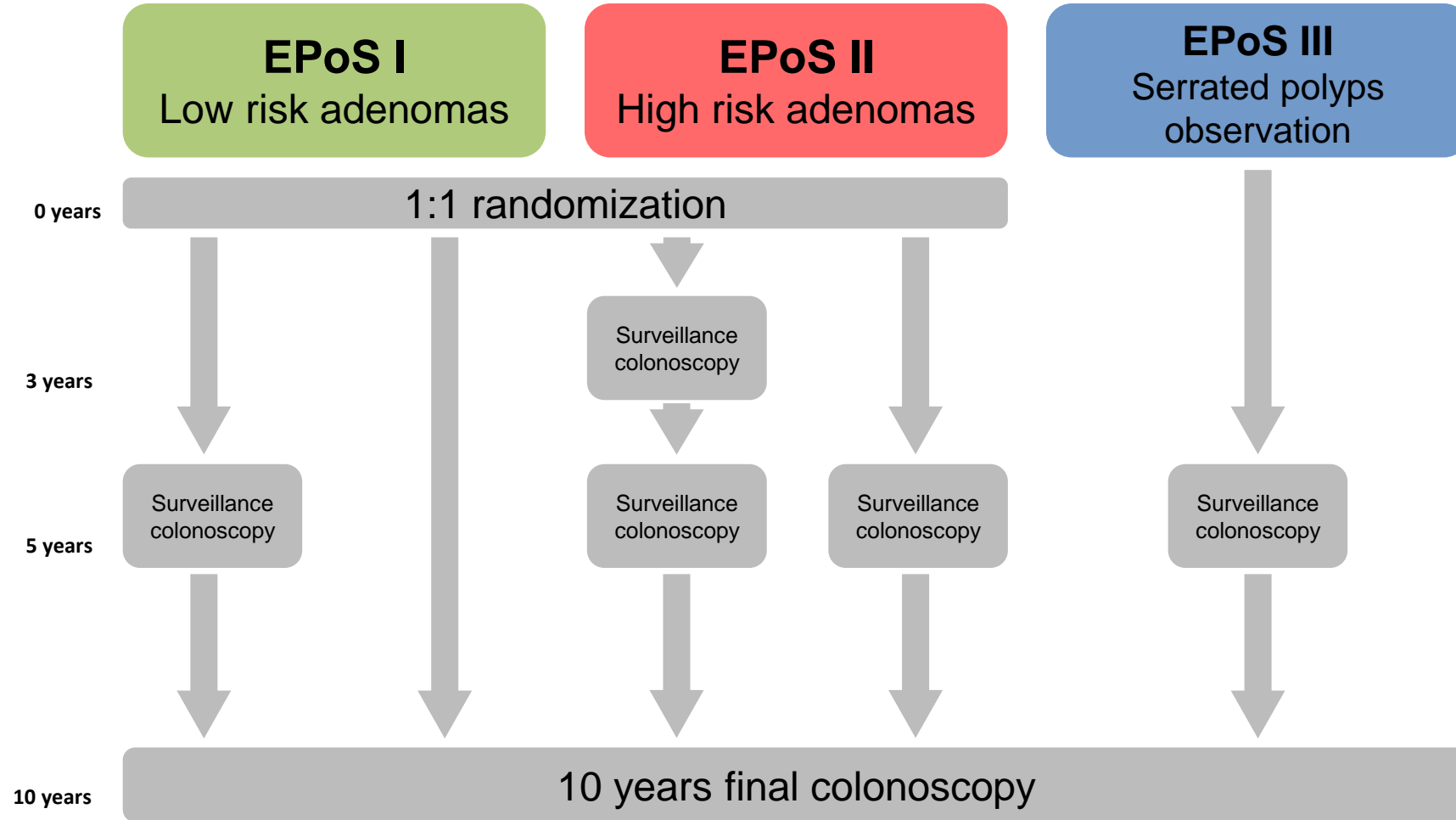
- **EPoS III**

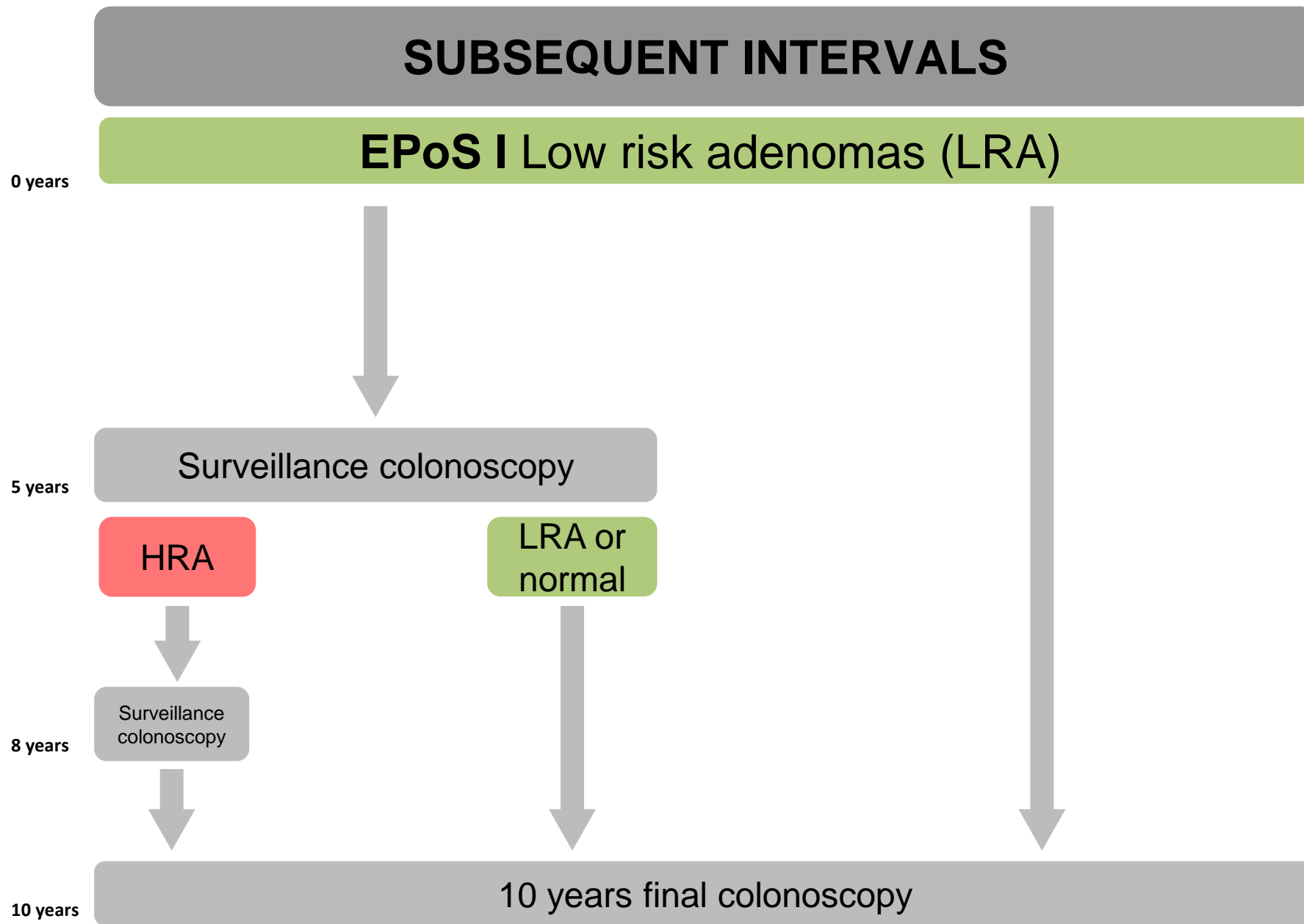
- Serrated polyps ≥ 10 mm at any location
- Serrated polyps ≥ 5 mm proximal to splenic flexure
- No adenomas at baseline



EPOs trials

European Polyp Surveillance





SAMPLE SIZE CALCULATION

CRC incidence at 10 years

	Power	P1 proportion	P2 proportion	Group size	Total sample size
EPoS I	90%	0.01 (1%)	0.015 (1.5%)	6,783	13,566
EPoS II	90%	0.02 (2%)	0.027 (2.7%)	6,852	13,704

Reference	Year of baseline colonoscopy	Study type	10-Year CRC incidence Low risk	10-Year CRC incidence High risk
Lee et al, Gastroenterology 2019	2004-2010	US cohort study 64,000 patients Mean age 61.6 years, 54% females	0.5%	1%
He et al, Gastroenterology 2019	1989 →	US cohorts (NHS, PHS), 6,161 patients with conventional adenomas Mean age 59 years, 77% females	0.3%	1.7%
Wieszcy et al, Gastroenterology 2019	2000-2011	Polish cohort study 236,089 patients Mean age 56 years, 62% females	0.4%	0.8%
Click et al, JAMA 2018	1993-2001	US PLCO sigmo trial 15,935 patients w/adenomas at sigmo screening Mean age 64 years, 39% females	0.7%	1.9%

SAMPLE SIZE CALCULATION EPoS I UPDATE

10 year CRC incidence (P1=P2)	Acceptable increase (delta)	Power	Group size	Total sample size
0.005	0.005	90	3409	6818
0.005	0.005	80	2461	4922
0.006	0.005	90	4086	8172
0.006	0.005	80	2950	5900
0.007	0.005	90	4763	9526
0.007	0.005	80	3438	6876
0.008	0.005	90	5438	10876
0.008	0.005	80	3926	7852
0.009	0.005	90	6111	12222
0.009	0.005	80	4412	8824
0.01	0.005	90	6783	13566

SAMPLE SIZE CALCULATION EPoS II UPDATE

10 year CRC incidence (P1=P2)	Acceptable increase (delta)	Power	Group size	Total sample size
0.01	0.007	90	3461	6922
0.01	0.007	80	2499	4998
0.011	0.007	90	3803	7606
0.011	0.007	80	2746	5492
0.012	0.007	90	4145	8290
0.012	0.007	80	2992	5984
0.013	0.007	90	4486	8972
0.013	0.007	80	3238	6476
0.014	0.007	90	4826	9652
0.014	0.007	80	3484	6968
0.015	0.007	90	5165	10330
0.015	0.007	80	3729	7458
0.016	0.007	90	5504	11008
0.016	0.007	80	3973	7946
0.017	0.007	90	5842	11684
0.017	0.007	80	4218	8436
0.018	0.007	90	6179	12358
0.018	0.007	80	4461	8922
0.019	0.007	90	6516	13032
0.019	0.007	80	4704	9408
0.02	0.007	90	6852	13704

FINAL RECRUITMENT MAY-2020



Report Date: 04-05-2020

Accrual End Date: 03-05-2020

All Sites

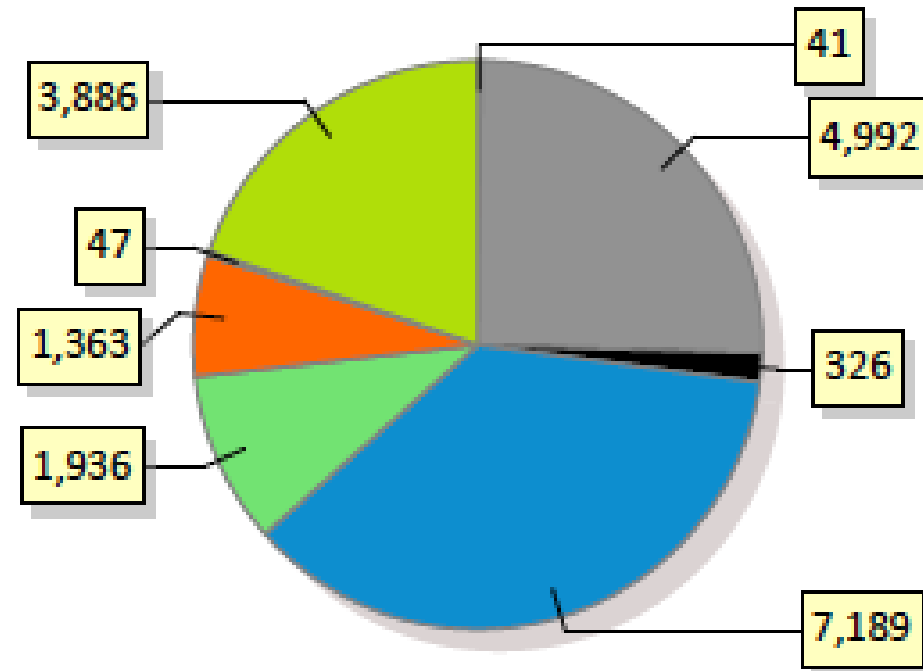
Total Accrual:	20,455	Last 1 month:	0
		Last 6 months:	1,930
		Last 12 months:	4,456

Gender: COMBINED

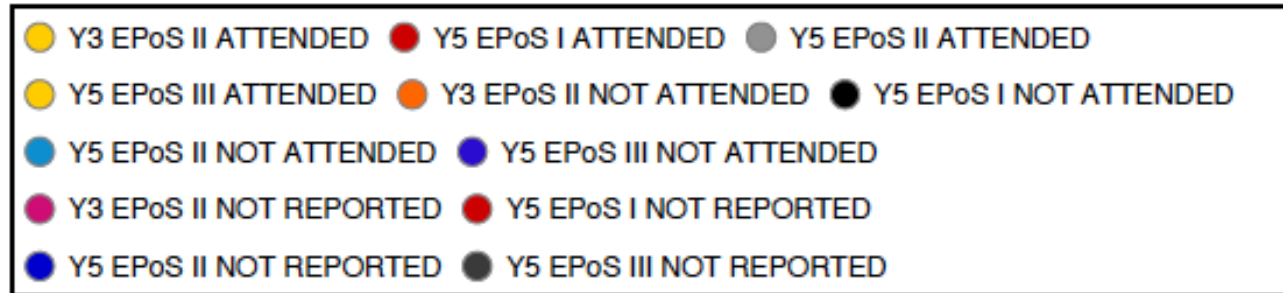
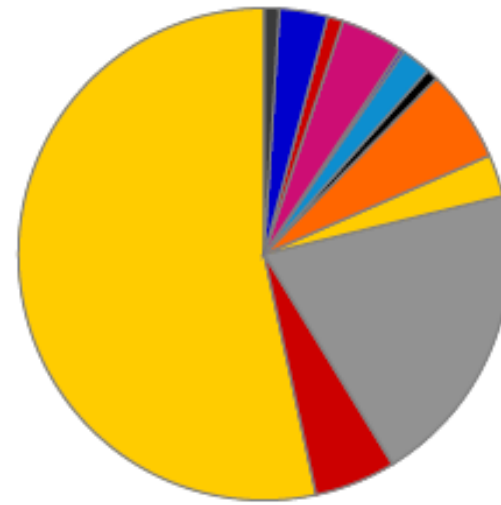
Age Group	EPoS I		EPoS II		EPoS III	
	Arm A	Arm B	Arm A	Arm B		
40 - 49	169	187	183	181	126	846
50 - 59	1,340	1,331	1,925	1,863	664	7,123
60 - 69	2,003	2,001	2,710	2,784	882	10,380
70 - 74	290	278	692	688	158	2,106
	3,802	3,797	5,510	5,516	1,830	20,455

20,455 → 17,916

Country Breakdown

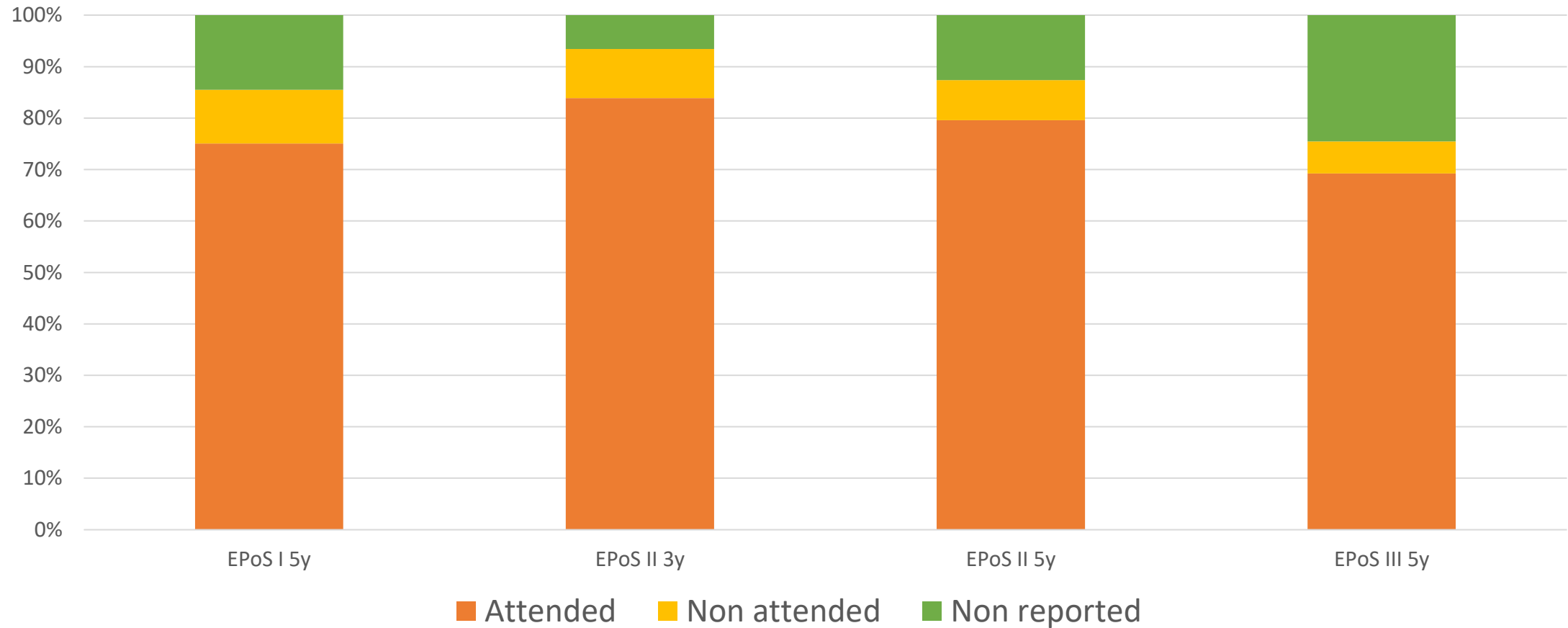


SURVEILLANCE



Status	Count
Y3 EPoS II ATTENDED	2.788
Y5 EPoS I ATTENDED	288
Y5 EPoS II ATTENDED	1.048
Y5 EPoS III ATTENDED	144
Y3 EPoS II NOT ATTENDED	318
Y5 EPoS I NOT ATTENDED	39
Y5 EPoS II NOT ATTENDED	103
Y5 EPoS III NOT ATTENDED	13
Y3 EPoS II NOT REPORTED	218
Y5 EPoS I NOT REPORTED	54
Y5 EPoS II NOT REPORTED	166
Y5 EPoS III NOT REPORTED	51

SURVEILLANCE STATUS



SUMMARY

- EPoS is the largest prospective study about surveillance ever made
- End of recruitment: May-2020
- Update of sample size calculation with new evidences
- Low proportion of patients missing surveillance (15%)
- End of 1st surveillance EPoS II 3 years at May-2023
- End of 1st surveillance EPoS II May-2025
- Final results May-2030
- Nested studies already ongoing