

Lentigo maligna 2013-2019 in England; incidence and survival of 18377 cases.

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Declarations

I declare no conflicts of interest.

Why Lentigo Maligna (LM)

Melanoma in situ of rising incidence?

Australia (2019): 12.2 per 100,000 person years²

US, Minnesota (2014): 13.7 per 100.000 person years³



Progression to lentigo maligna melanoma (LMM)

Lifetime risk: 2-5%⁴⁻⁷

Mean time: 28.3 years ([95% CI]: 20.0-40.5)⁷

Kaplan-Meier disease-specific survival for LM⁸:

5-year: 100%

10-year: 97.1%

1. Image reproduced from: DermNet NZ.
2. Guitera et al. *Australas J Dermatol*, 2019.
3. Mirzoyev et al. *JAAD*, 2014.
4. Weinstock et al. *BJD*, 1987.

5. Zoutendijk et al. *BJD*, 2019.
6. Greveling et al. *J Invest Dermatol*, 2016.
7. Menzies et al. *Melanoma Res*, 2020.
8. Gambichler et al. *BJD*, 2014.

Why Lentigo Maligna (LM)

Median age at diagnosis: 66-72²⁻³

Treatment options⁴

Surgery (WLE, staged excision, Mohs) – 5mm WLE margins⁵? → ±MDT

Imiquimod⁶, radiotherapy, cryotherapy, laser, expectant monitoring

Localised recurrence at 5y 5-20%⁷⁻⁸



Confocal microscopy⁹

59% had subclinical disease >5mm beyond dermoscopic margin

Confocal mapping changed management in 73% of patients

1. Image reproduced from: DermNet NZ.
2. Swetter *et al. JID*, 2005.
3. Gassenmeier *et al. JAAD*, 2019.
4. Marsden *et al. BJD*, 2010.

5. Agarwal *et al. JAAD*, 2002.
6. Marsden *et al. BJD*, 2017.
7. DeBloom *et al. Dermatol Surg*, 2010.
8. Bub *et al. Arch Dermatol*, 2004.
9. Guitera *et al. JAMA Dermatol*, 2013.

Aims

Calculate the crude incidence of LM in England between 2013-2019

Compare survival of patients after LM to those after melanoma

Describe patient characteristics with LM

Methods

The Get Data Out (GDO) program

Openly available (<https://www.cancerdata.nhs.uk/getdataout/skin>)

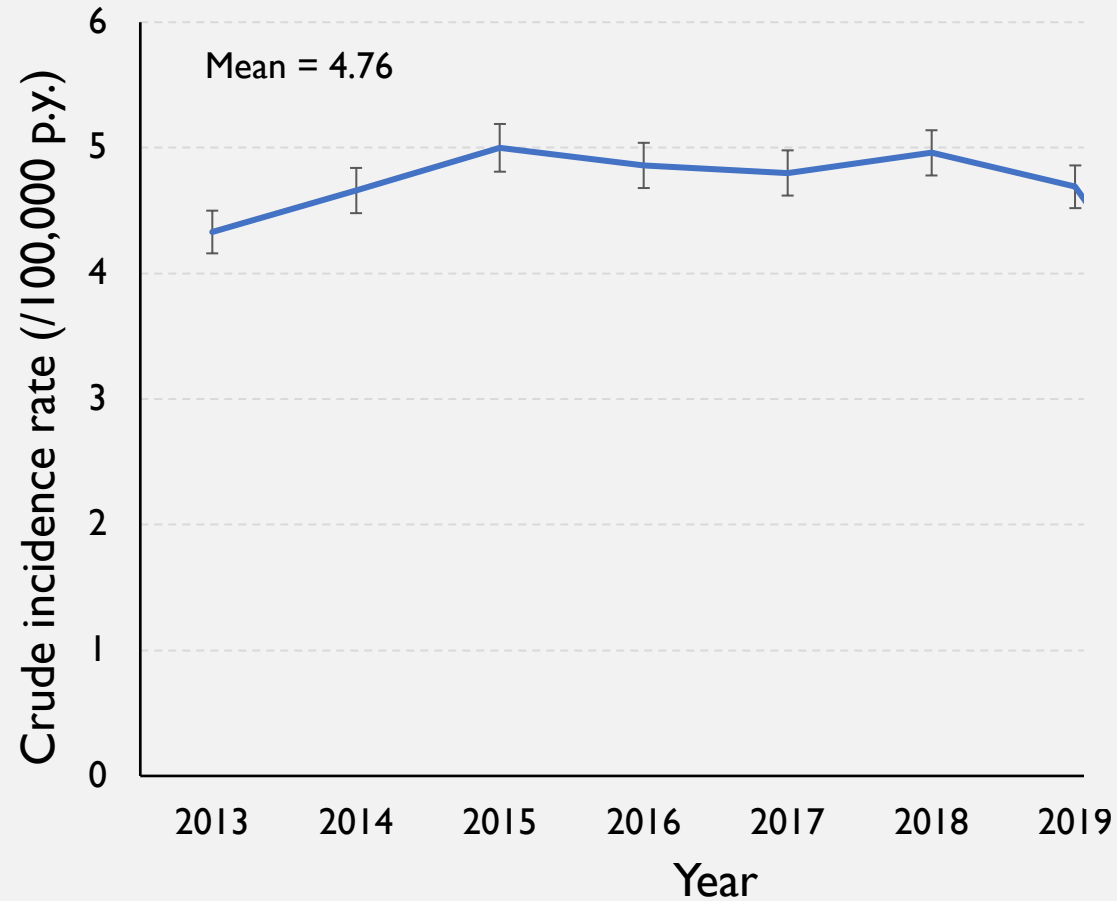
LM in England: 2013-2019 (2020)

Regression analysis (Joinpoint software)

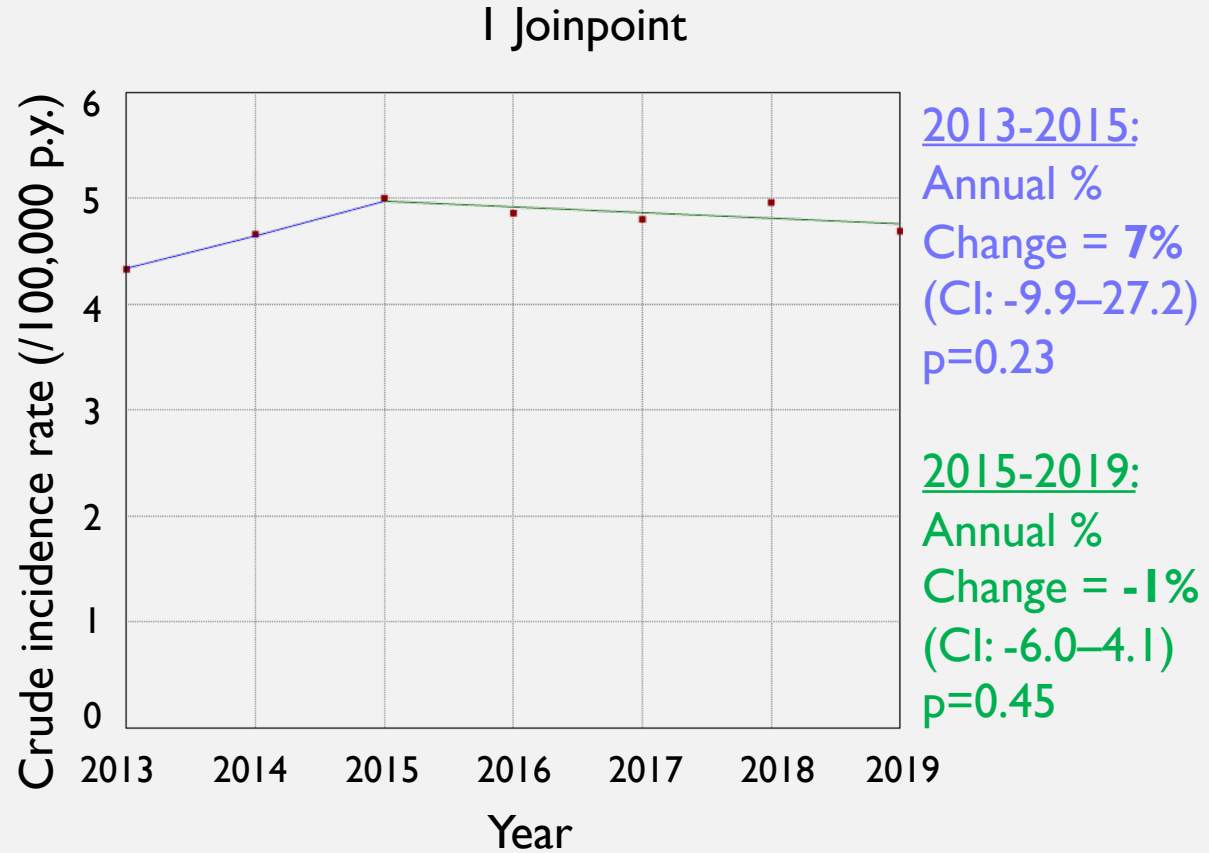
Incidence, net survival, age, gender

LM 2013-2019 - plateauing incidence

18377 new cases in total (2625 per year on average)

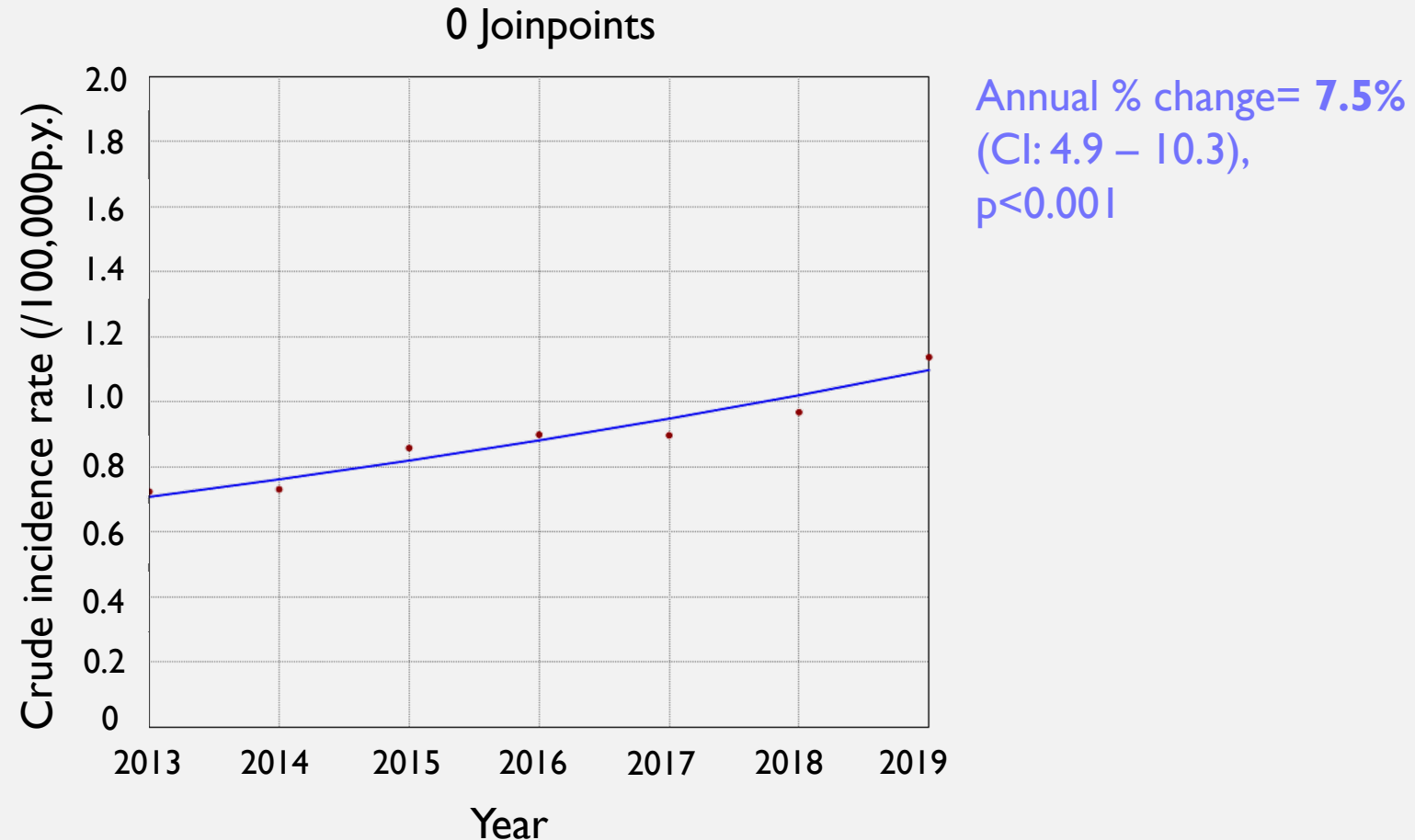


1742
new cases

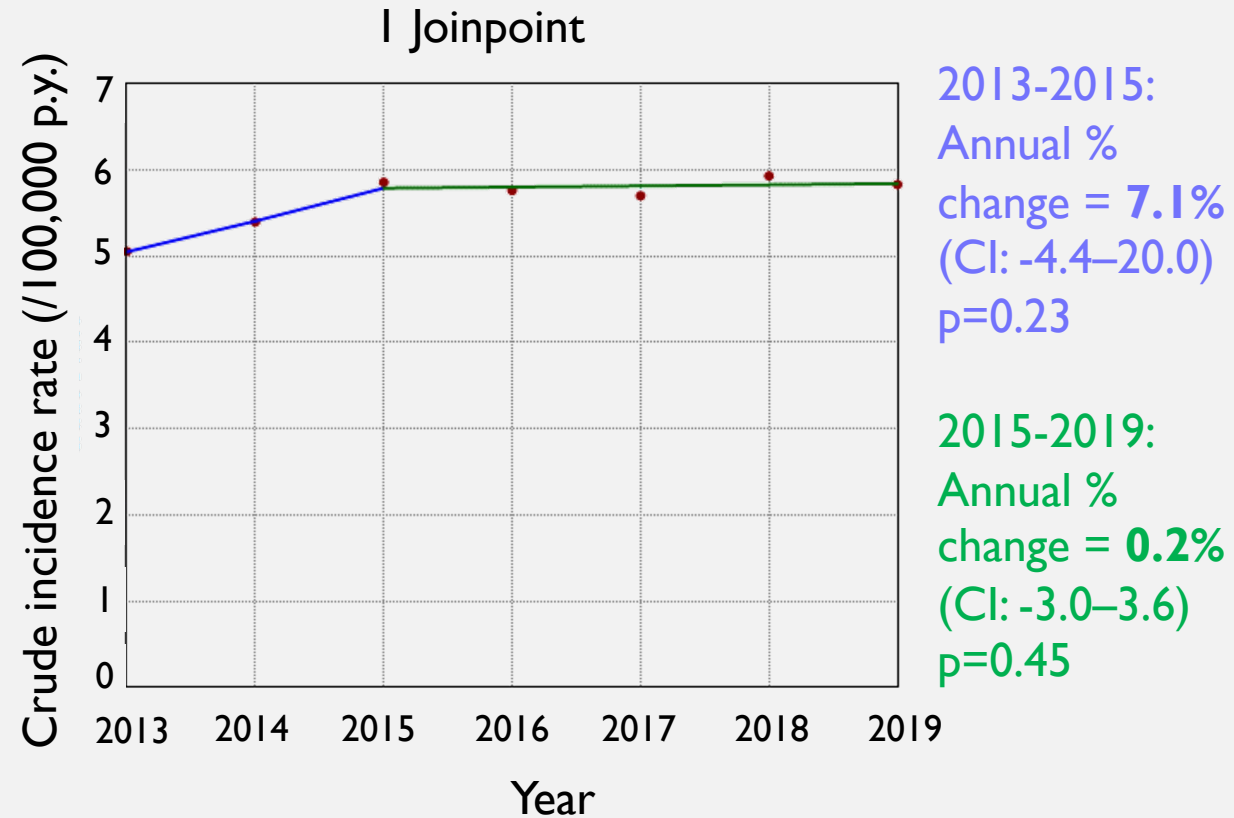
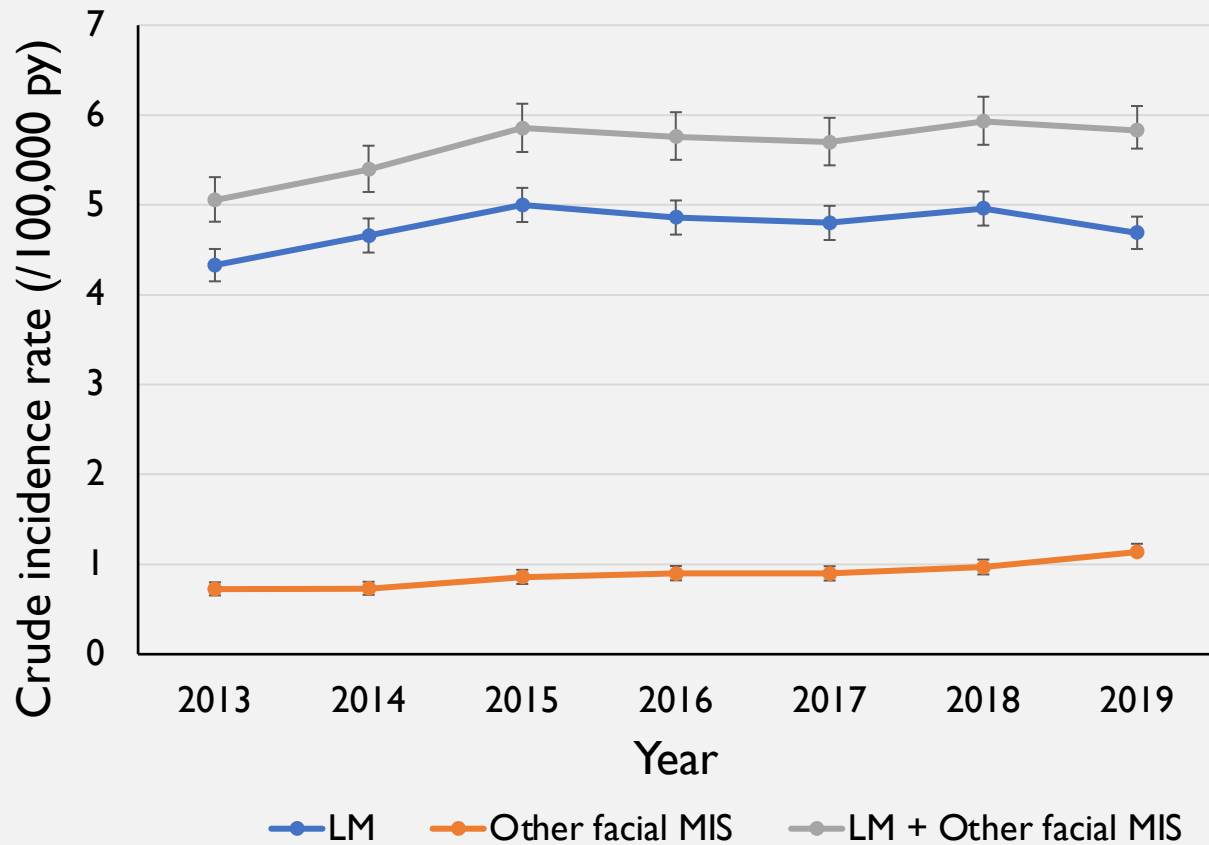


Change in crude incidence: Other melanoma *in situ* (face, head and scalp)

3453 new cases in total (491 per year on average)



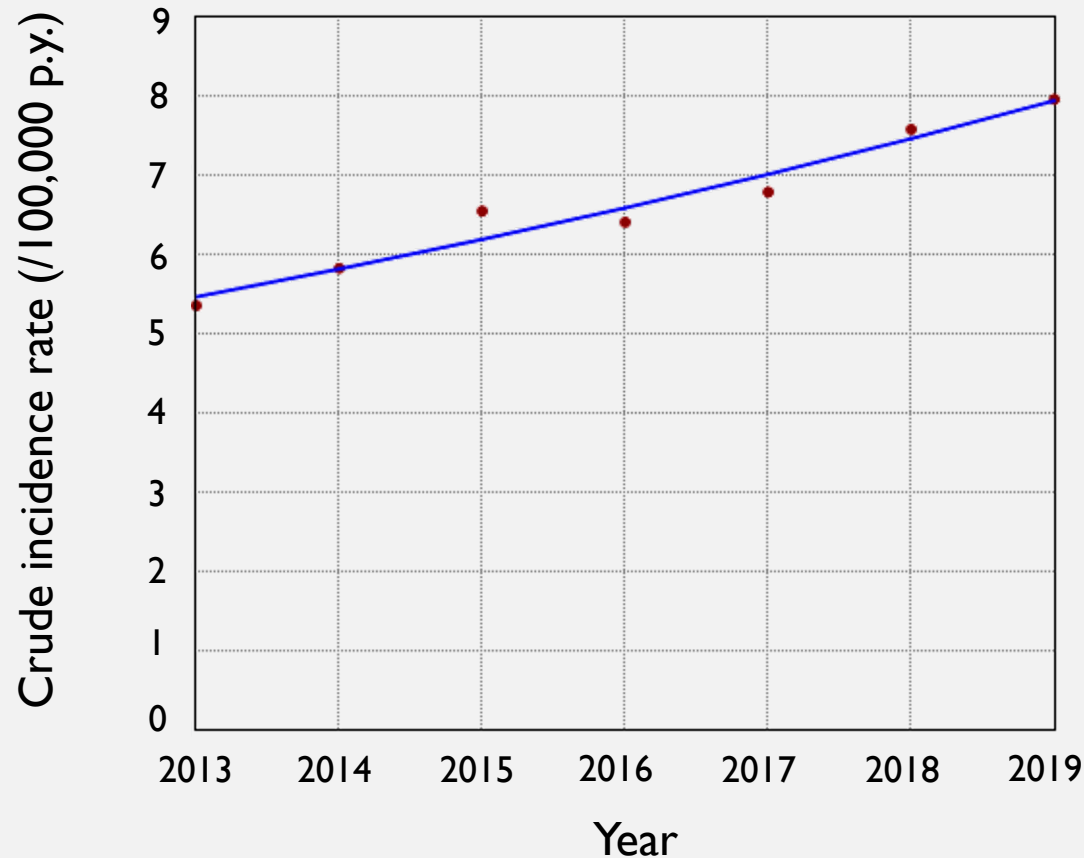
Registration practices are unlikely to explain the plateauing incidence of LM



Change in crude incidence: Other melanoma *in situ* (all sites)

25682 new cases (3669 per year on average)

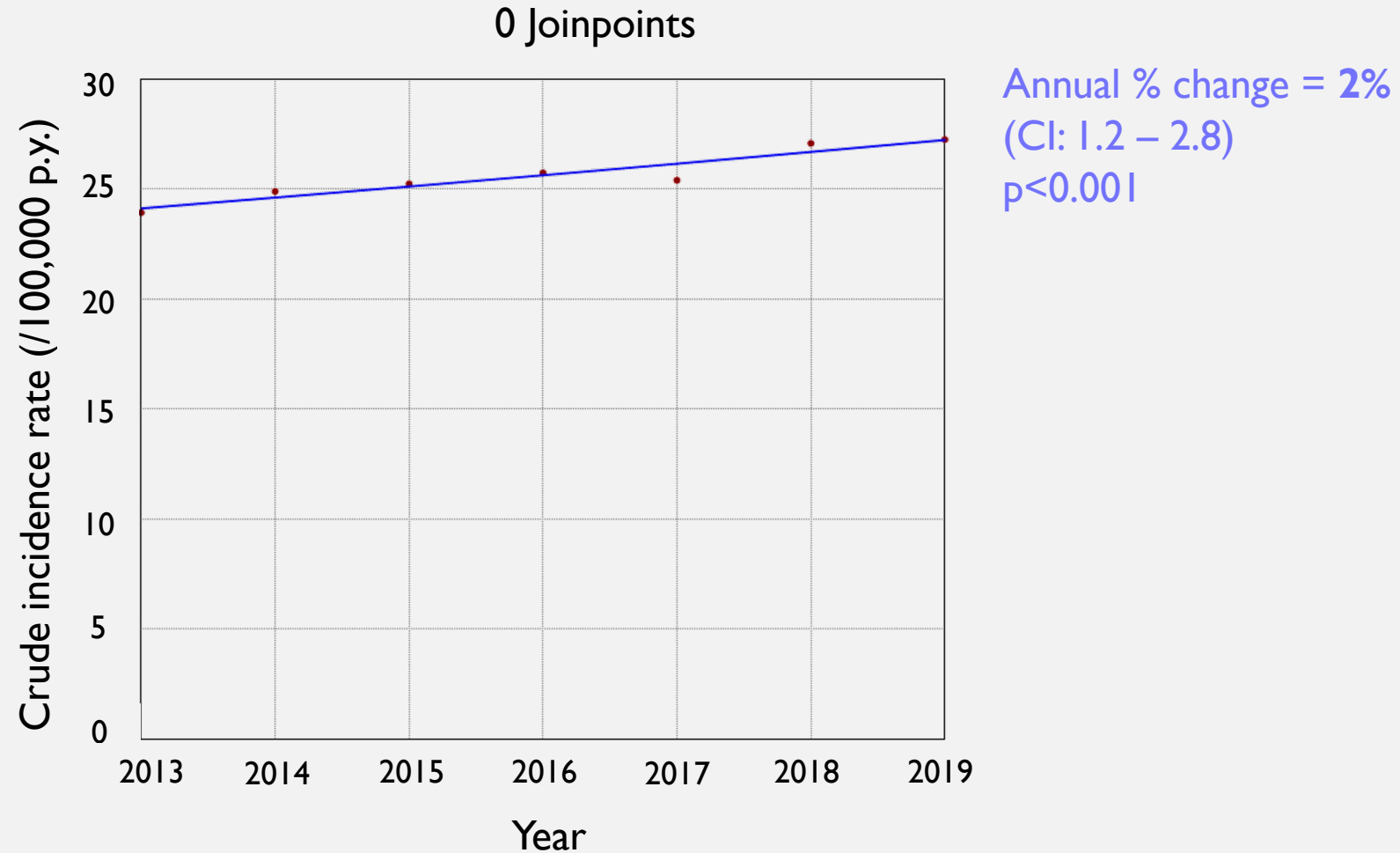
0 Joinpoints



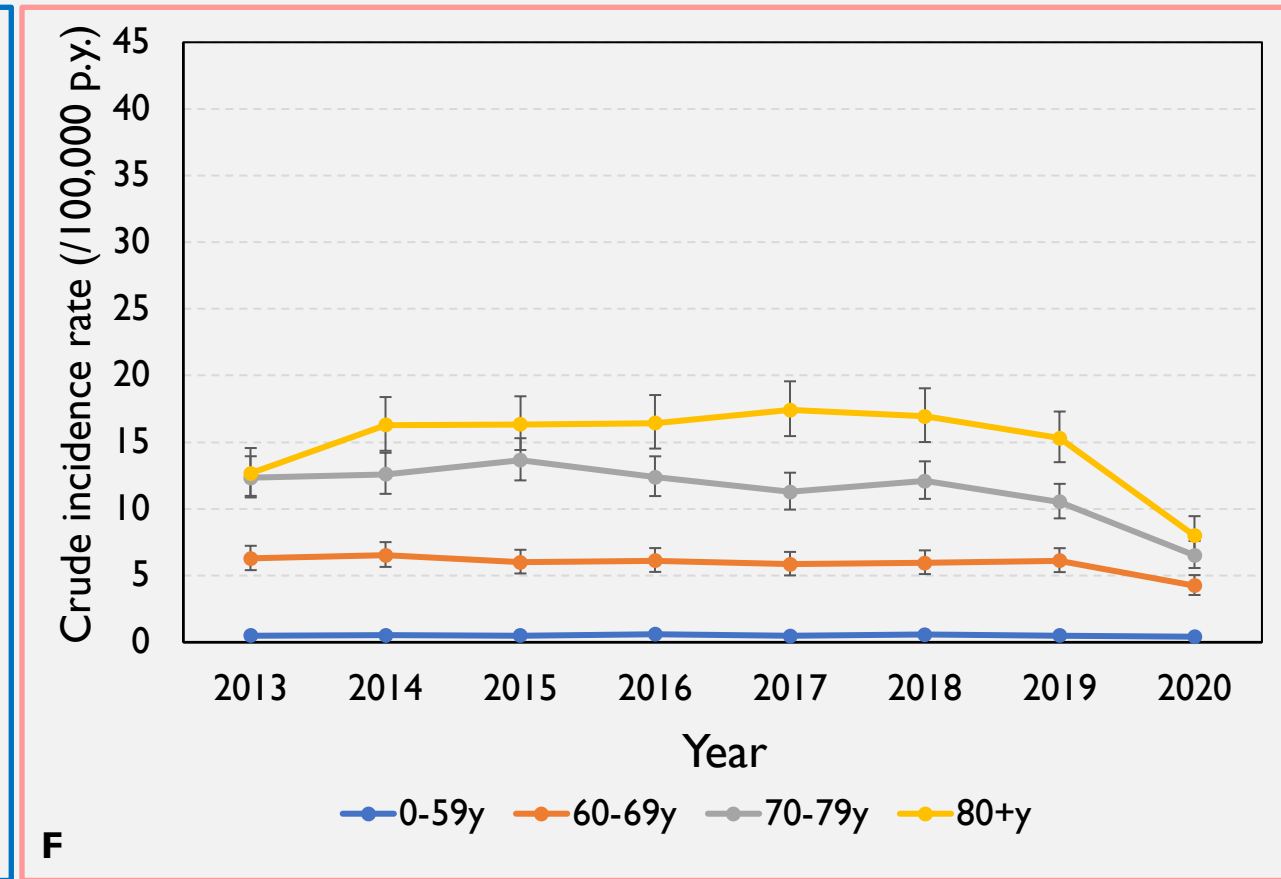
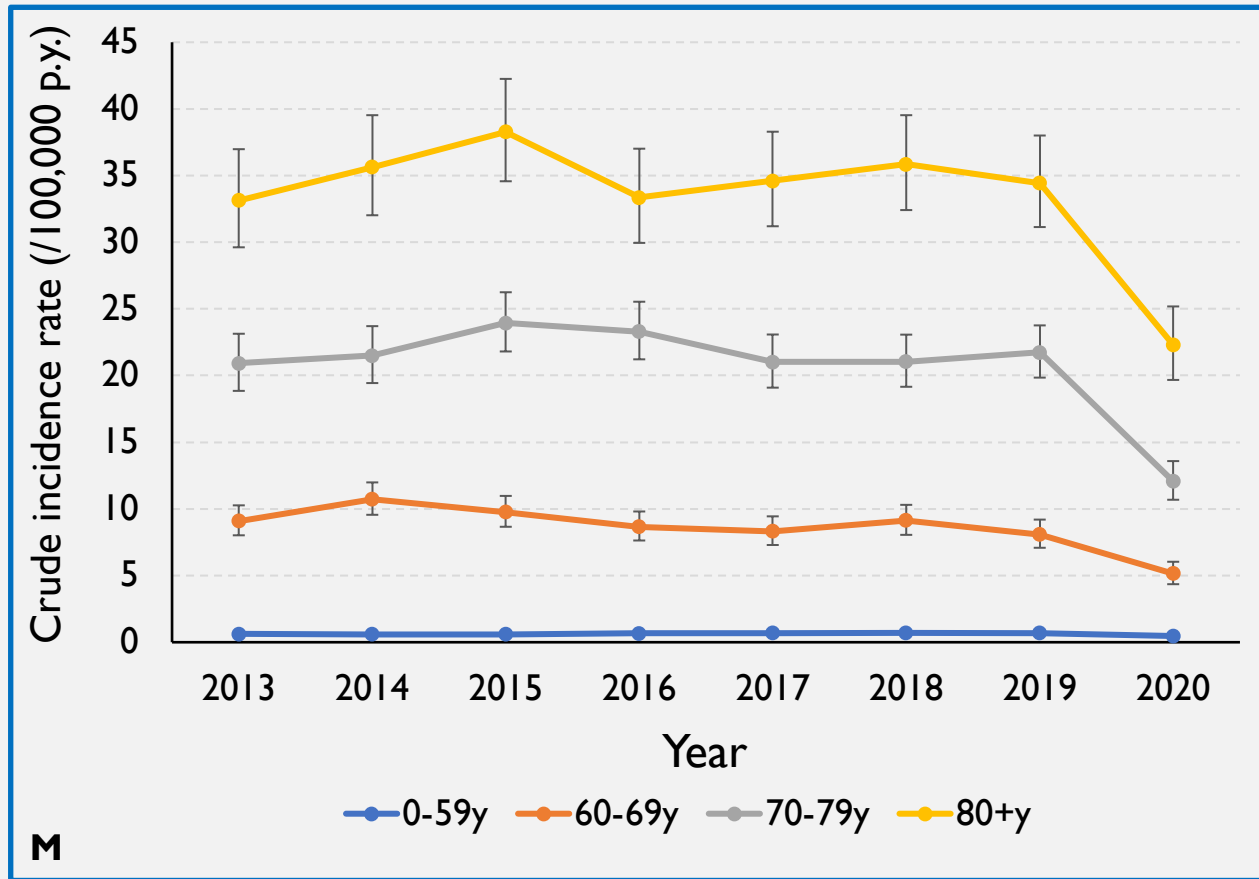
Annual % change = **6.4%**
(CI: 4.7 – 8.2)
 $p < 0.001$

Change in crude incidence: Melanoma (all stages, not *in situ*)

99054 new cases (14151 per year on average)



Crude incidence rates of LM by age and gender



LM survival data from the GDO program

Net 5-year survival, %

		Male			Female			Combined
		60-69 years	70-79 years	80 years +	60-69 years	70-79 years	80 years +	
2013-2015		100.6	103.7	104.9	100.4	102.4	>103.1	>100.5 (.h)
		(98.8-102.5)	(101.3-106.2)	(98.1-111.8)	(98.7-102.2)	(99.9-104.8)	(.h)	

Net 5-year (%) survival for melanoma: 89.3 (88.7-89.8)

Limitations

Report-level data

LM registration based on histopathological data or MDT discussions

Typically treated (without biopsy) or untreated LMs not included

Patients treated privately likely underrepresented

Private laboratories not required to submit data

Crude incidence rates

Summary - LM

This is the largest series of high-quality data on LM in the world
Plateauing incidence (in contrast with international data)¹⁻⁶

2020 data (Covid-19)

More common in men and with old age

Excellent 5-year survival rates ($\geq 100\%$)

Survival advantage

Fewer frail patients seeking care, being referred, undergoing biopsy or surgery

Current practice and treatment options?

1. Matas-Nadal et al. *Int J Dermatol*, 2018. (Spain)
2. Greveling et al. *J Invest Dermatol*, 2016 & Niekerk et al. *Int J Dermatol*, 2022. (Netherlands)
3. Čelakovská et al. *Acta Med (Hradec Kralove)*, 2020 (Czech Republic)

4. Guitera et al. *Australas J Dermatol*, 2019. (Australia)
5. Mirzoyev et al. *J Am Acad Dermatol*, 2013. (USA)
6. Toender et al. *Melanoma Res*, 2014. (Denmark)

Acknowledgements

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- Dr Khaylen Mistry
- Dr Birgitta van Bodegraven



How does recording work for GDO?

- GDO publishes cancer statistics produced by NDRS (formerly PHE) from data in the cancer registry, on:
 - Patient characteristics
 - Incidence
 - Treatment
 - Survival rates
 - Routes to diagnosis.
- Why until 2020?
 - Covid
 - Later data not available yet.