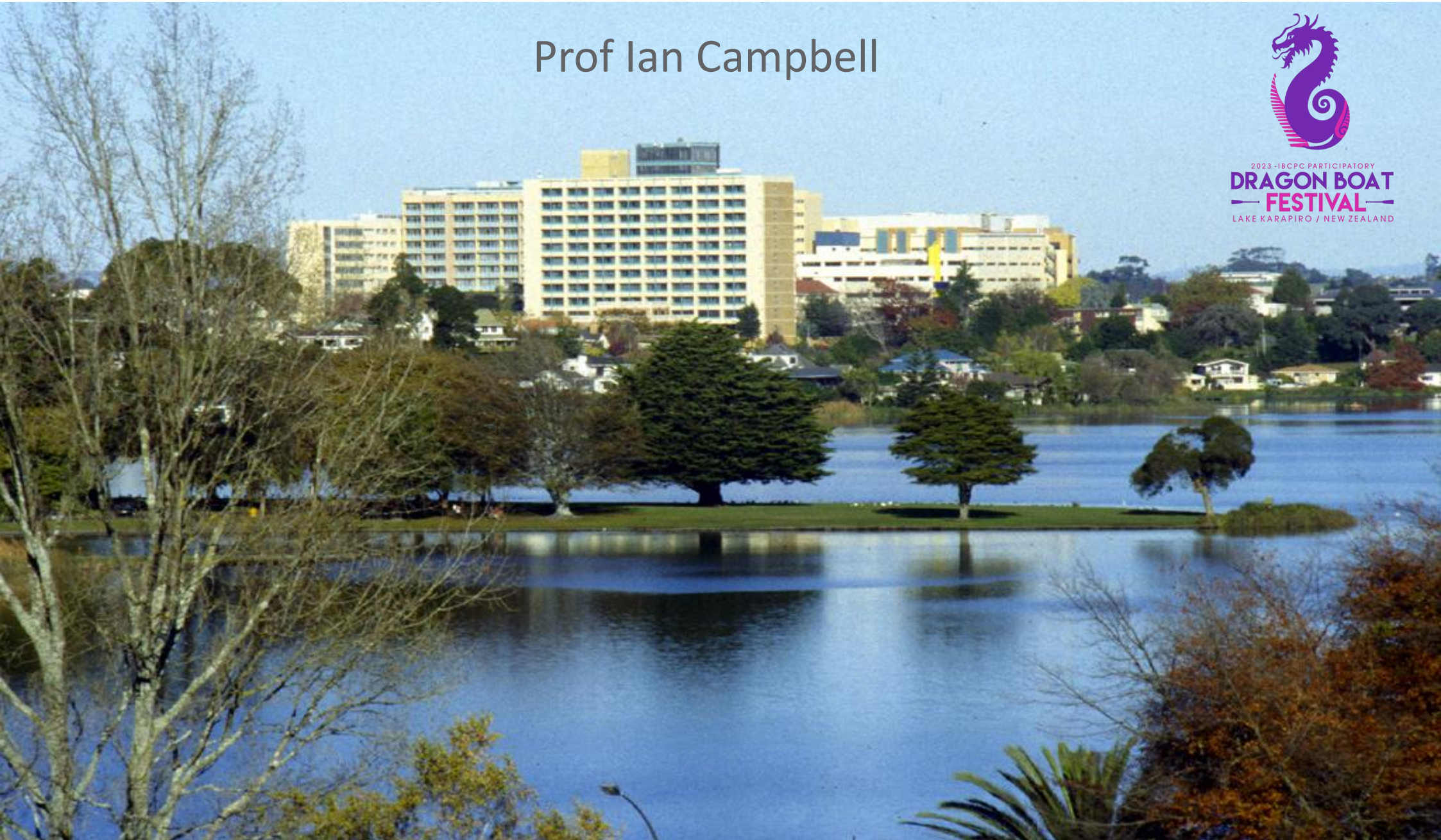


# Teaching on breast cancer in Aotearoa

Prof Ian Campbell



2023-IBCPC PARTICIPATORY  
**DRAGON BOAT**  
**FESTIVAL**  
LAKE KARAPIRO / NEW ZEALAND









## Female Breast Cancer Over Time



### Over the last 25 years:

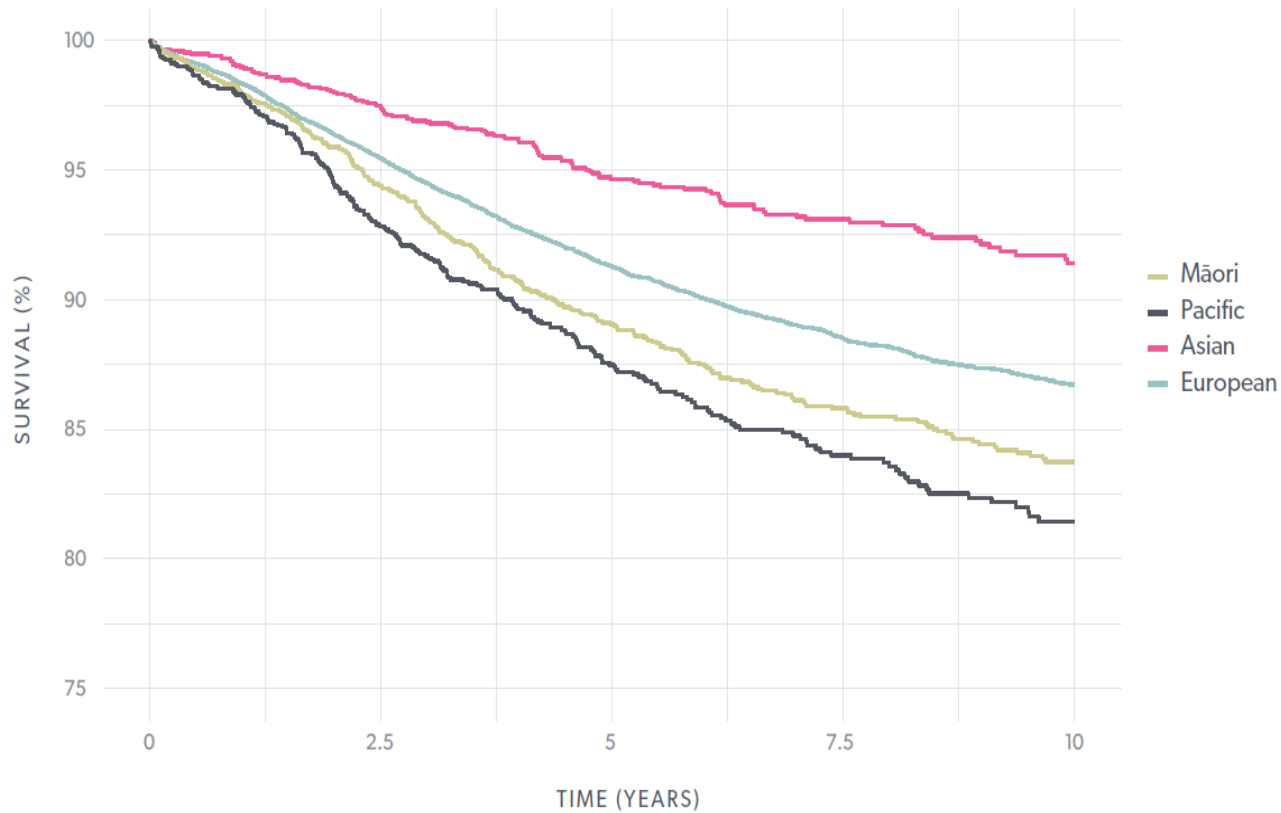
- the rate of new breast cancers among Kiwi women has increased by around 10%.
- the actual number of new diagnoses per year has increased by around 85%.
- the rate of breast cancer deaths among Kiwi women has reduced by around 35%.



30,000 voices:  
Informing a better future for breast cancer  
in Aotearoa New Zealand



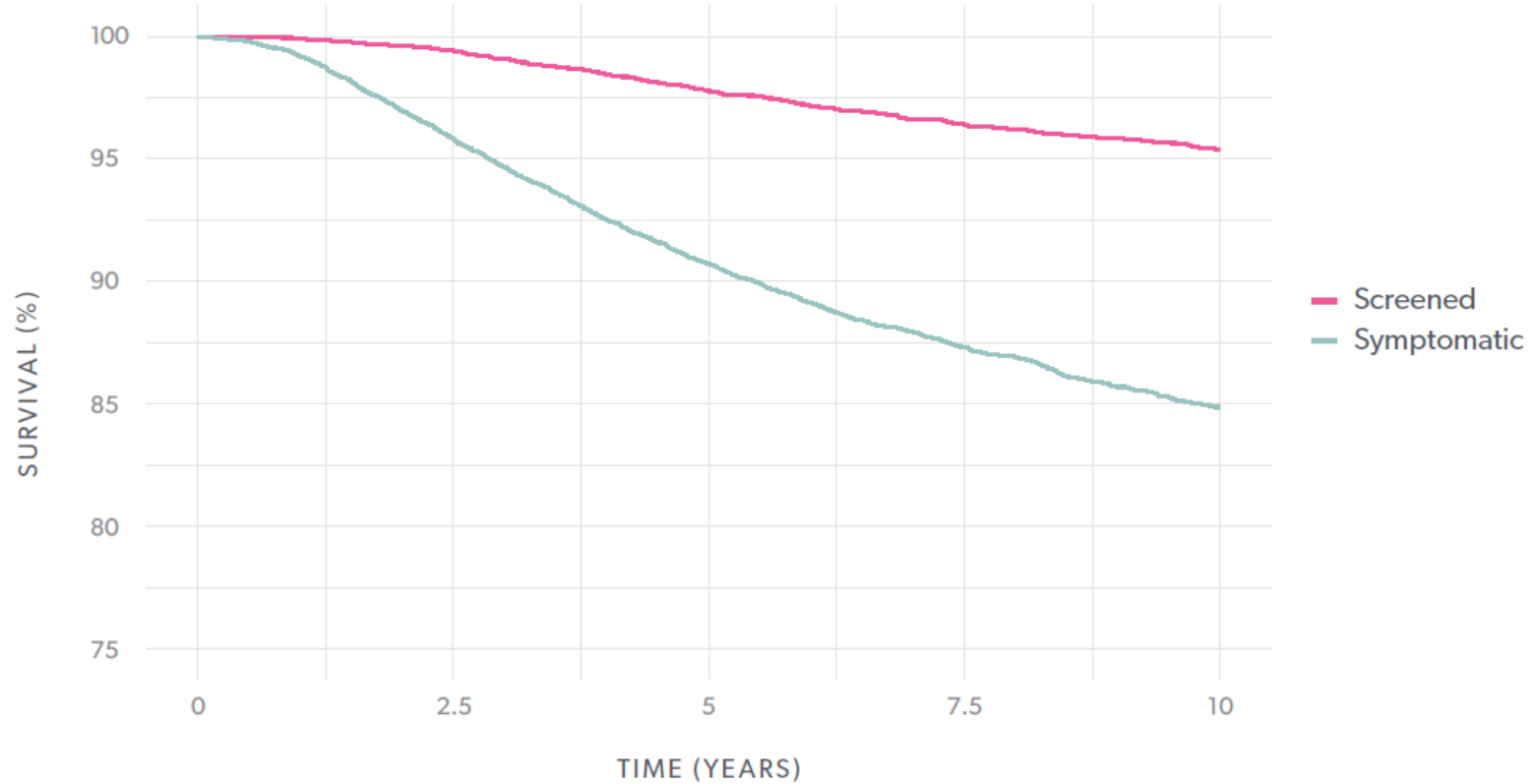
# BCSS by ethnicity



ETHNICITY	5-YEAR SURVIVAL	10-YEAR SURVIVAL
Māori	89% (88-90)	84% (82-85)
Pacific	87% (86-89)	81% (79-84)
Asian	95% (94-96)	91% (90-93)
European	91% (91-92)	87% (86-87)

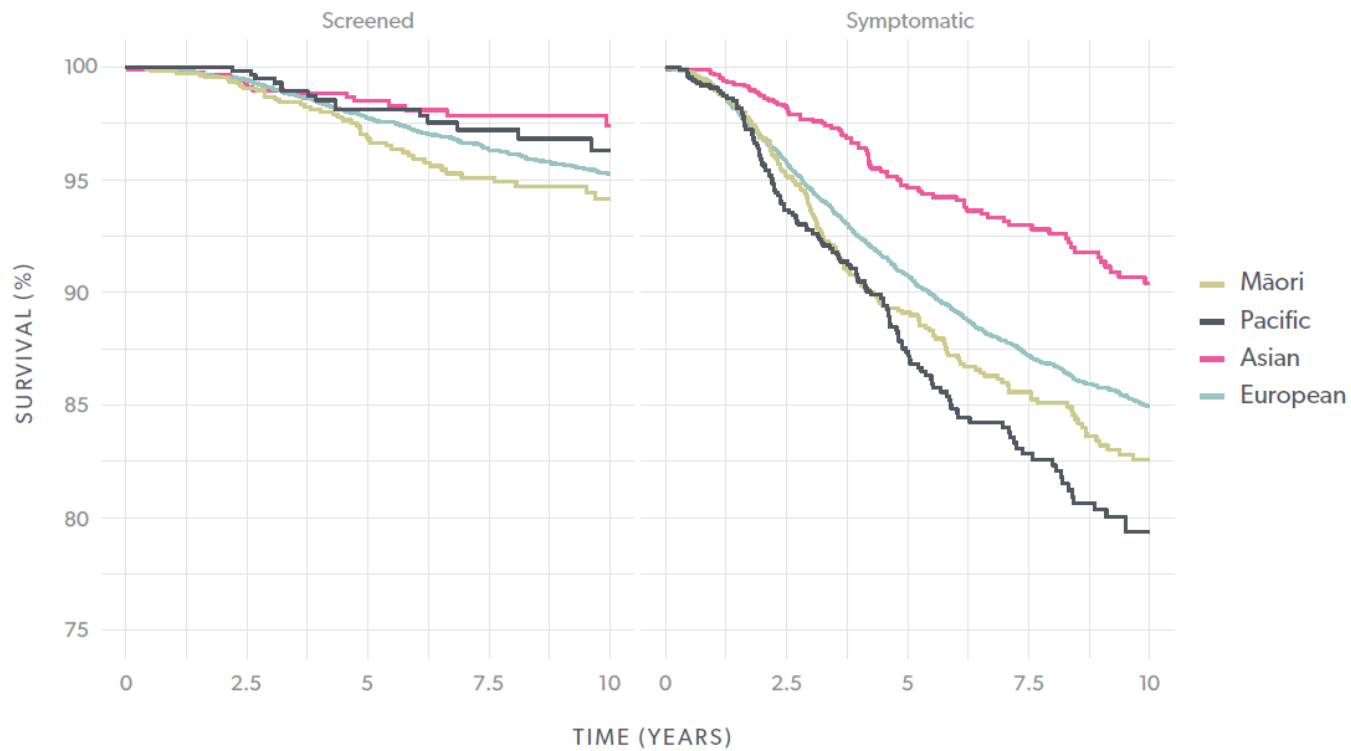


Characteristic	HR	95% CI	p-value
<b>Ethnicity</b>			
European	1.0		
Asian	0.62	0.51 (0.74)	<0.001
Māori	1.33	1.17 (1.50)	<0.001
Pacific	1.52	1.32 (1.75)	<0.001



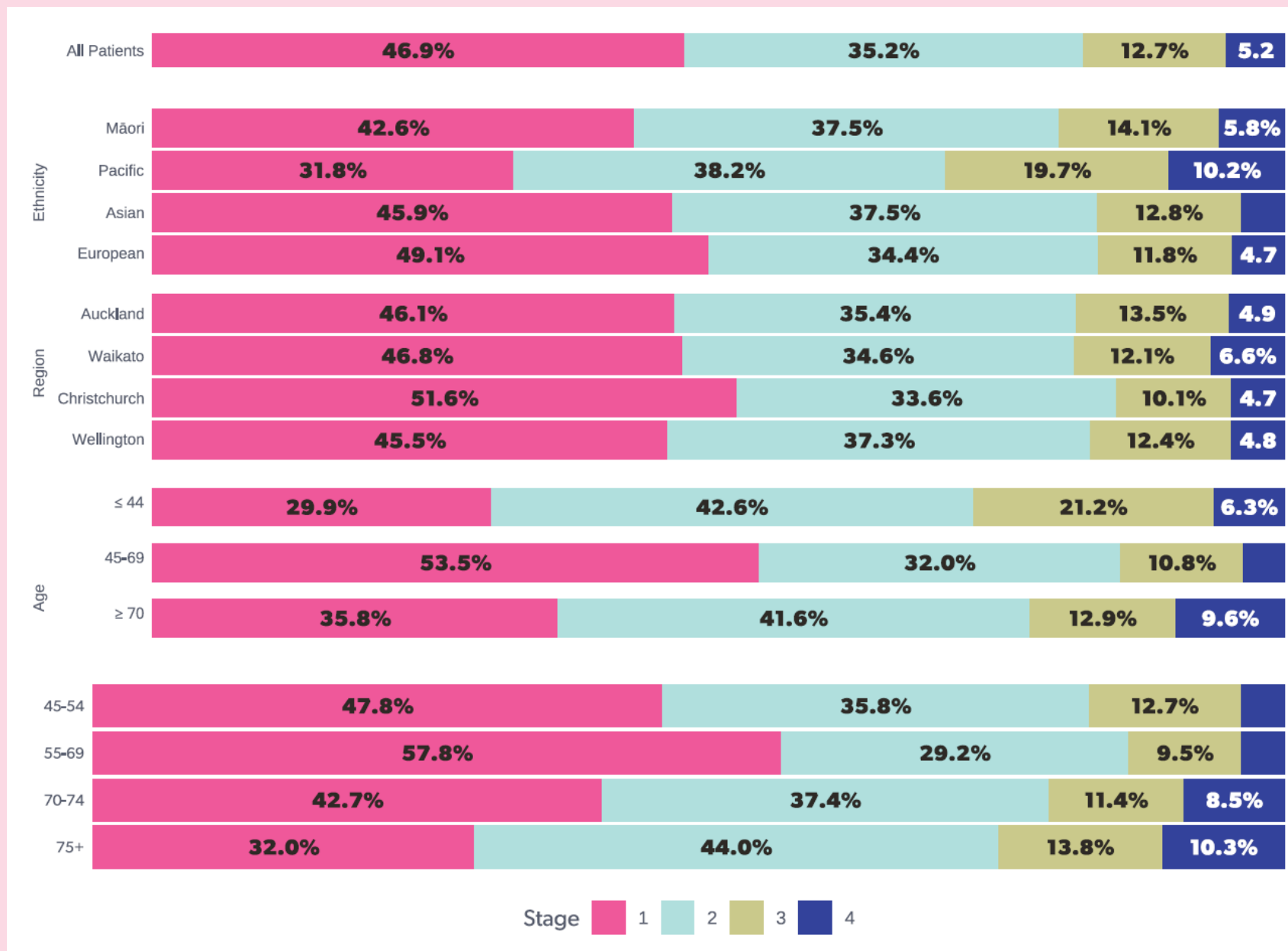
DETECTION METHOD	5-YEAR SURVIVAL	10-YEAR SURVIVAL
Screened	98% (97-98)	95% (95-96)
Symptomatic	91% (90-91)	85% (84-86)

## BCSS by detection method



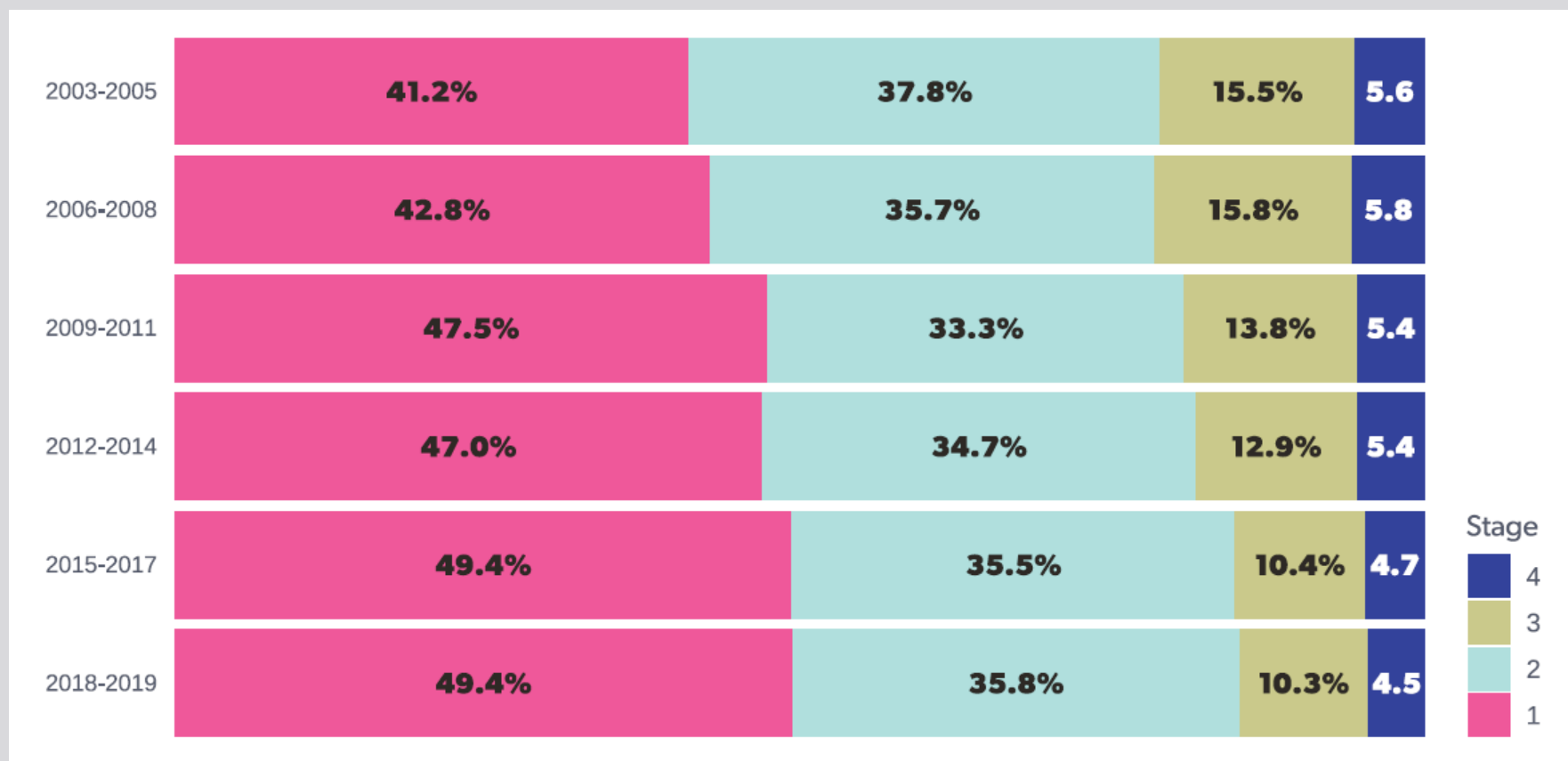
ETHNICITY	5-YEAR SURVIVAL	10-YEAR SURVIVAL
<b>Screened</b>		
Māori	97% (96-98)	94% (92-96)
Pacific	98% (97-99)	98% (97-99)
Asian	99% (98-99)	97% (96-99)
European	98% (97-98)	95% (95-96)
<b>Symptomatic</b>		
Māori	89% (87-91)	83% (80-85)
Pacific	87% (85-90)	79% (76-83)
Asian	95% (93-96)	90% (88-93)
European	91% (90-91)	85% (84-86)

# Tumour pathology: Stage

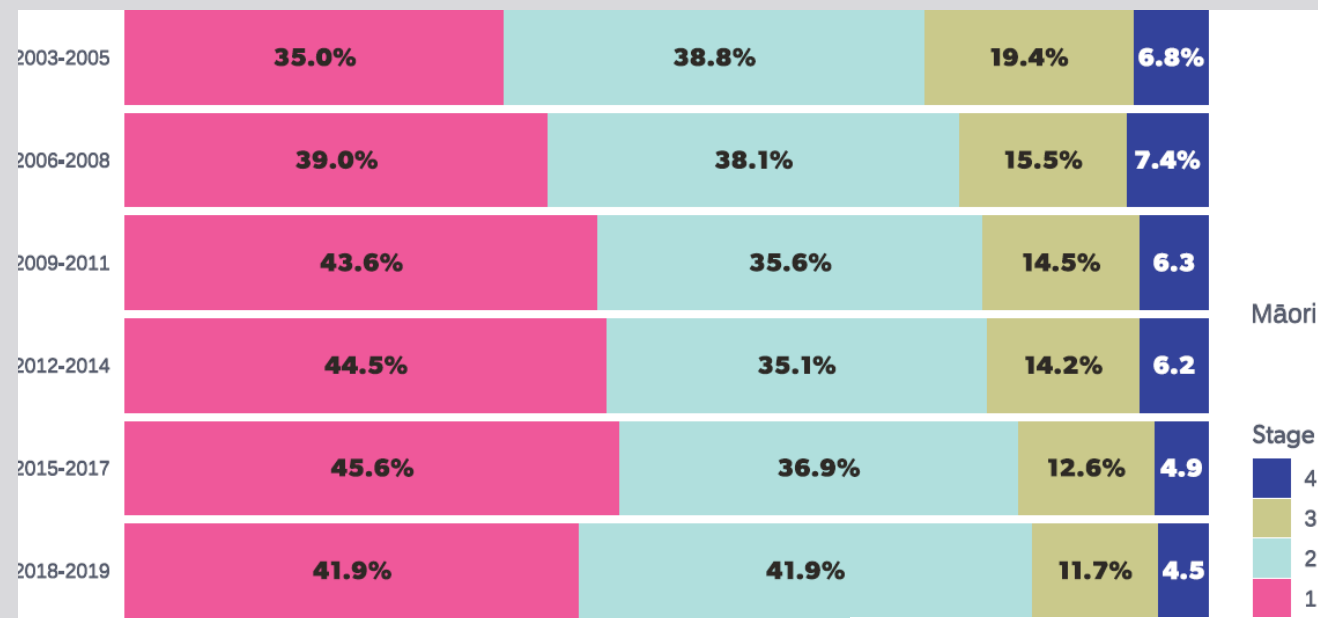




# Tumour stage over time

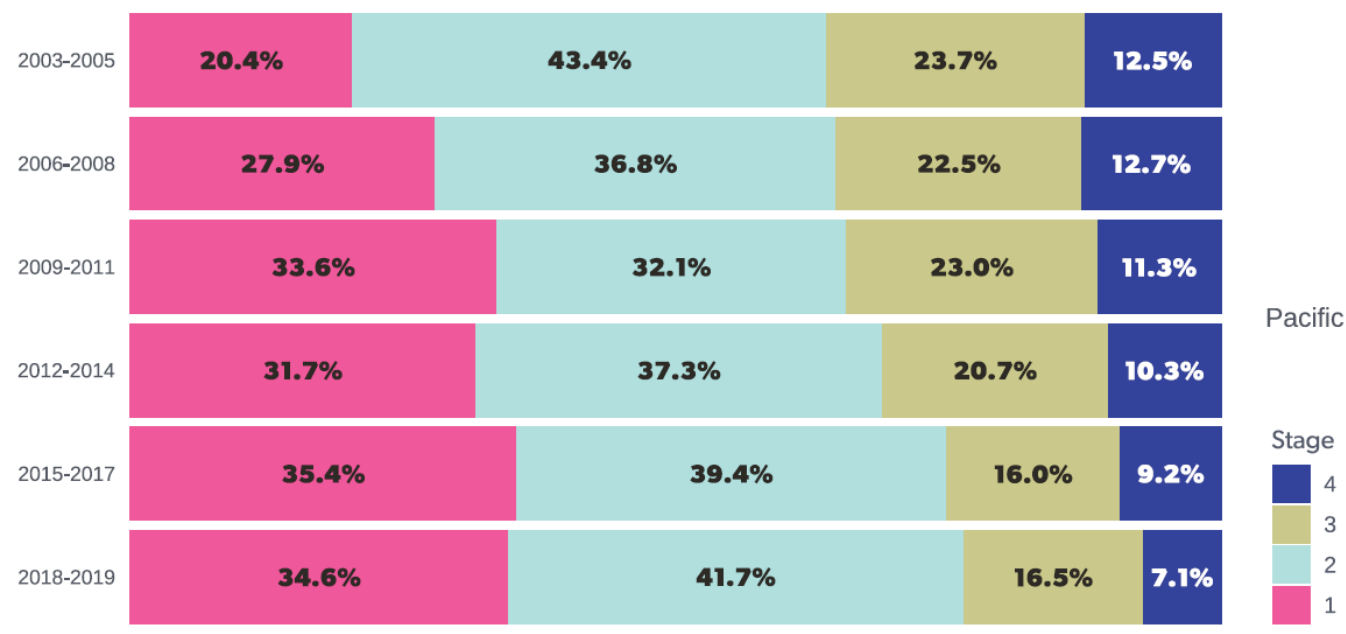


# Tumour stage over time – Māori and Pacific



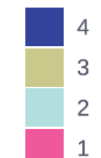
Māori

Stage



Pacific

Stage

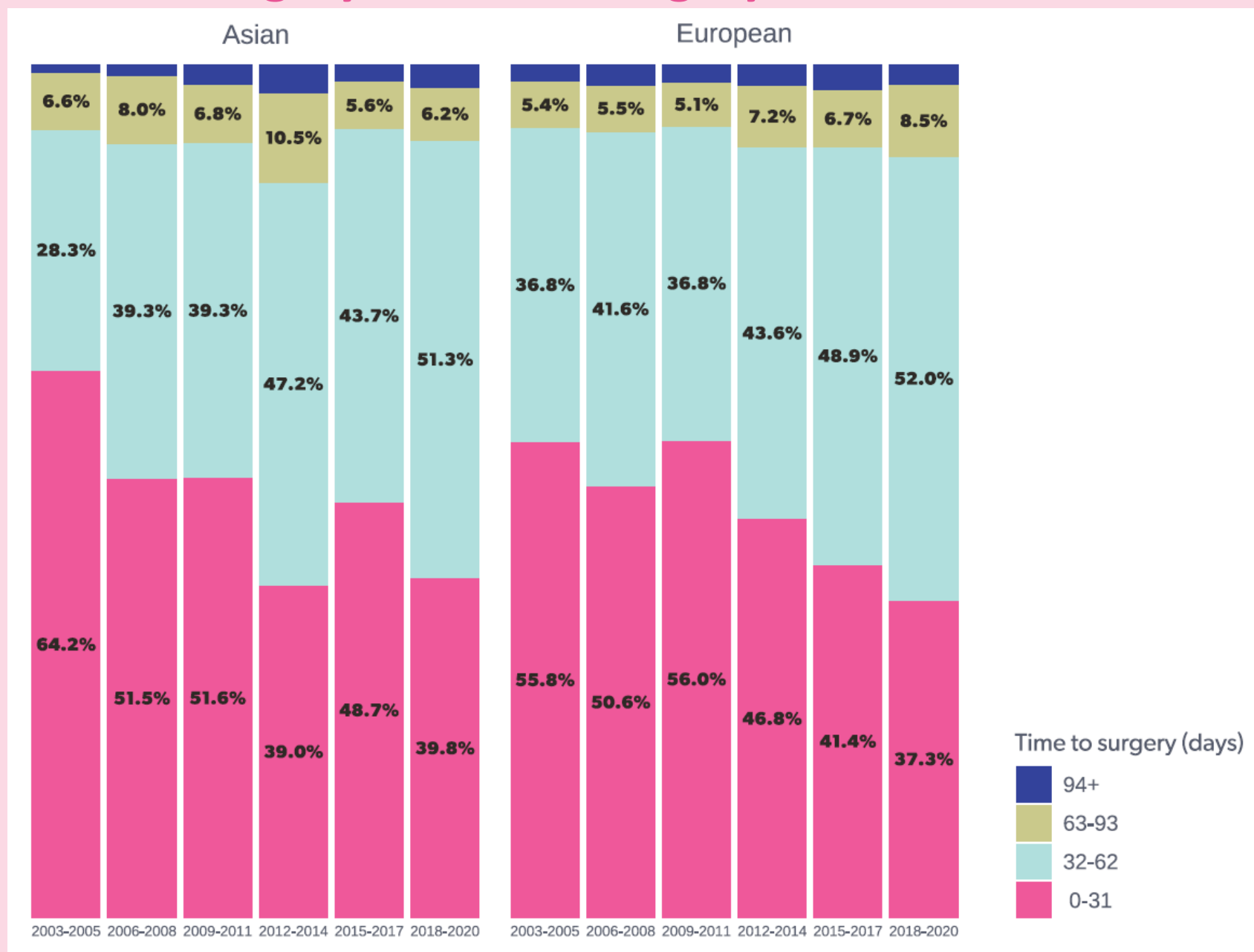




# Treatment: Surgery – time to surgery



# Treatment: Surgery – time to surgery



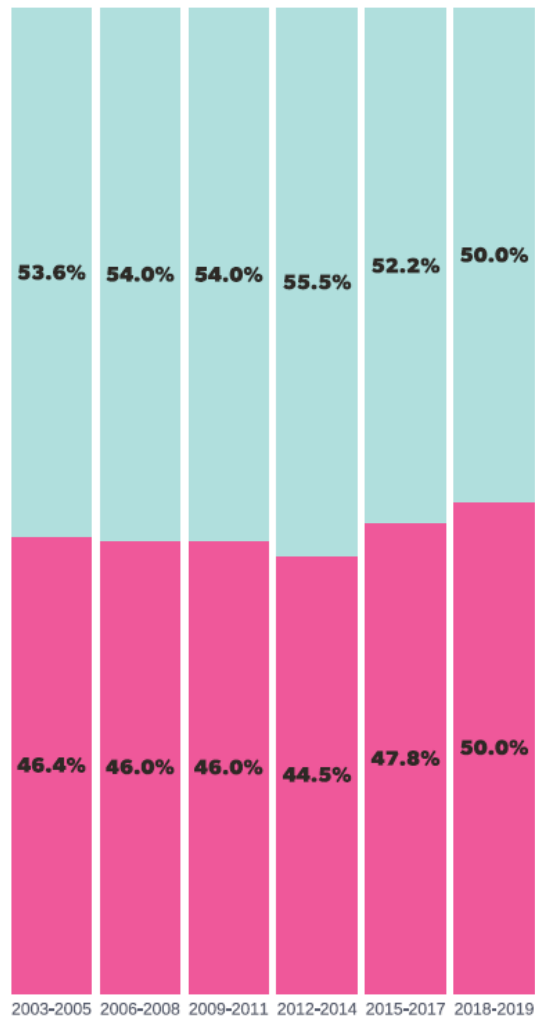


# Treatment: Surgery – type of surgery by region

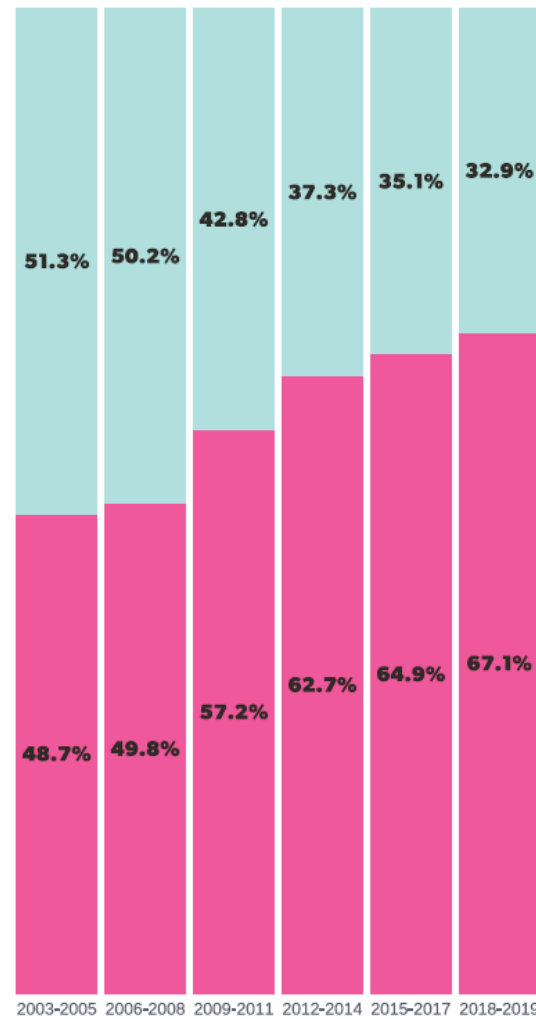
Surgery Performed

- Mastectomy
- BCS

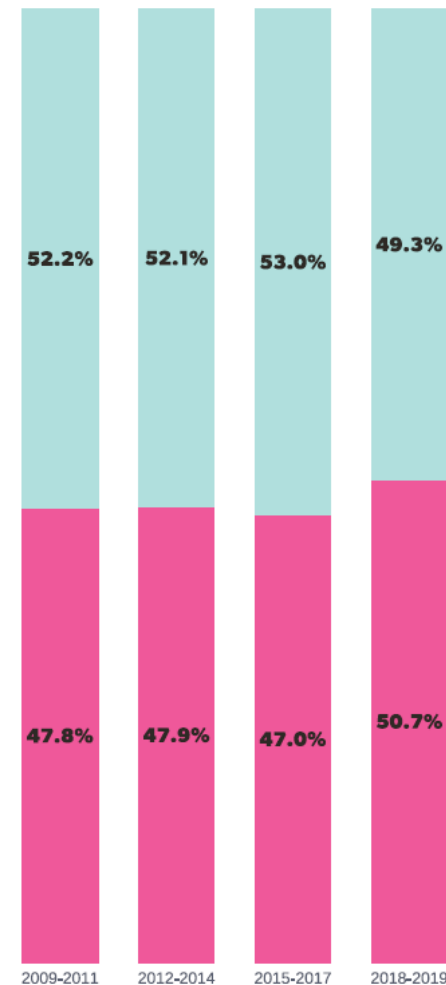
Auckland



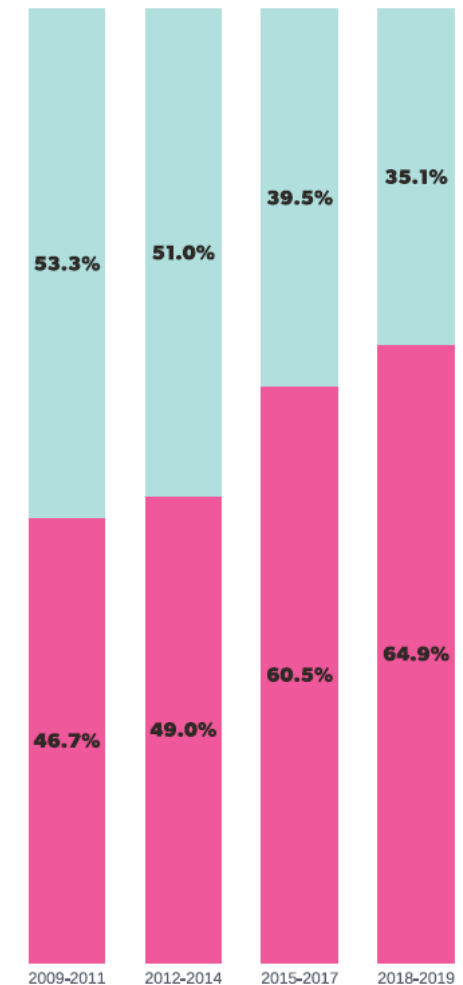
Waikato



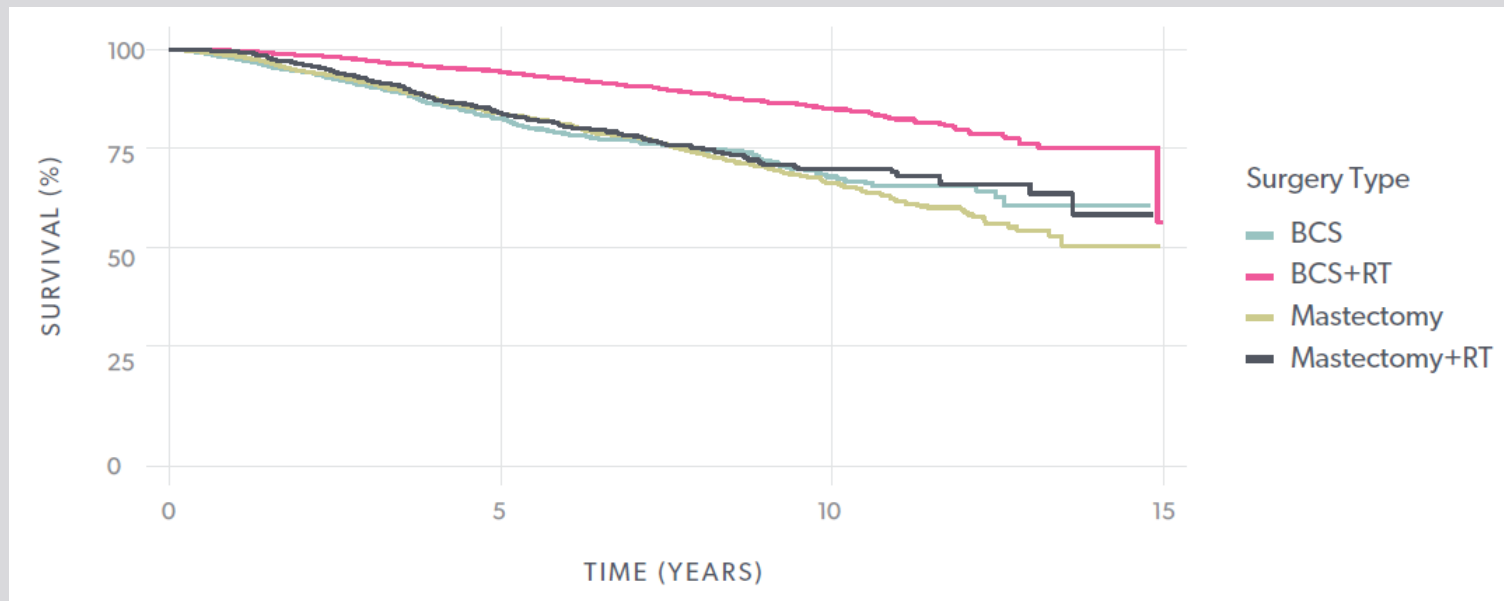
Christchurch



Wellington



# Survival by type of surgery



Type of surgery	Crude HR (95% CI)	Adjusted HR (95% CI) *	Adjusted HR (95% CI) **	Adjusted HR (95% CI) ***
BCS+RT	1.00	1.00	1.00	1.00
BCS	2.58 (2.17-3.08)	2.04 (1.71-2.44)	1.72 (1.43-2.08)	1.72 (1.42-2.07)
MTX	2.66 (2.34-3.02)	1.87 (1.65-2.16)	1.53 (1.34-1.77)	1.52 (1.32-1.75)
MTX+RT	2.35 (1.96-2.81)	2.41 (2.01-2.90)	1.38 (1.14-1.68)	1.42 (1.17-1.73)

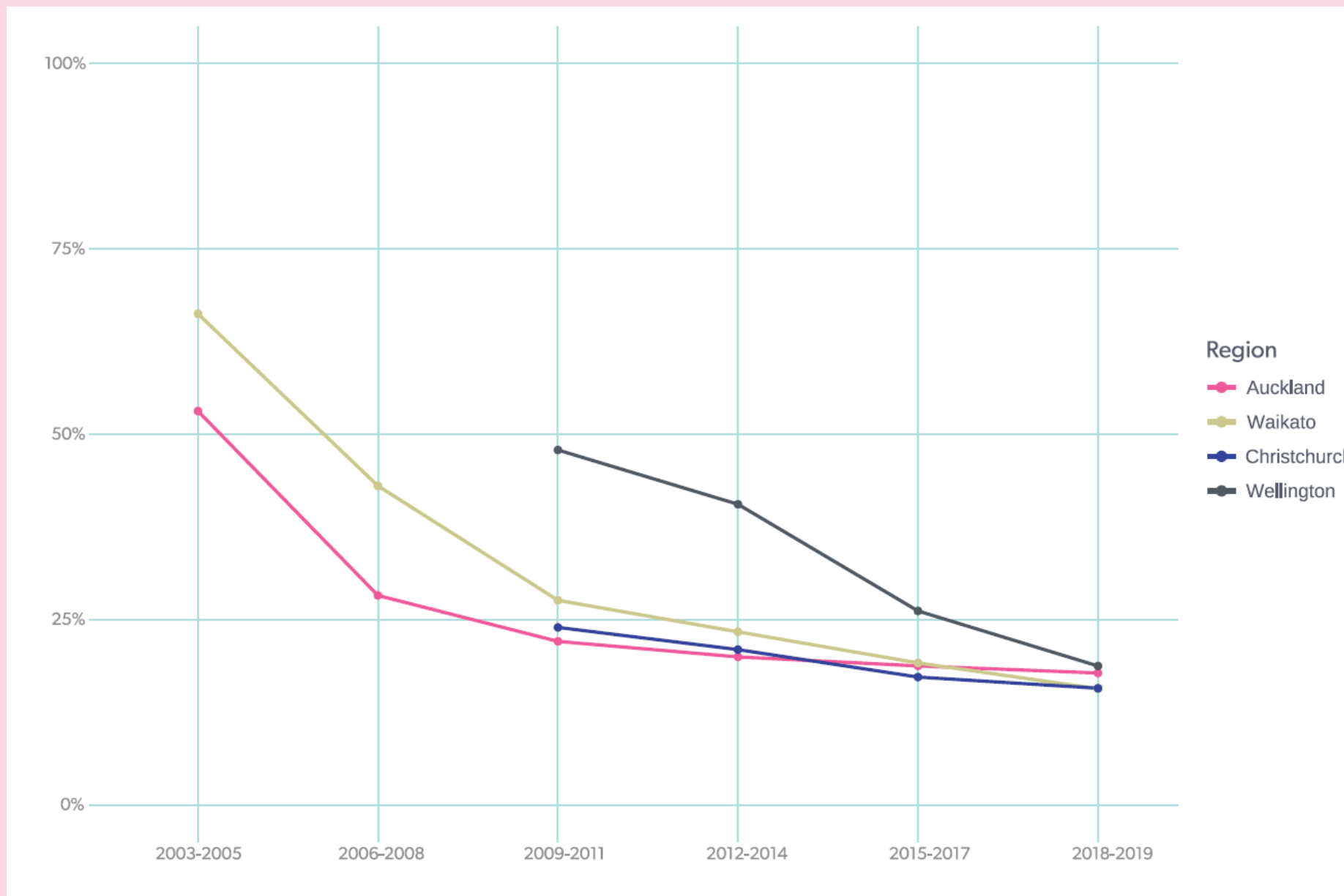
\*adjusted for demographic factors: age, ethnicity, NZ dep, urban status, register, private/public

\*\*adjusted for demographic and clinic-pathological factors: age, ethnicity, NZ dep, urban status, register, public/private, screen detected/symptomatic, grade, HER2, hormone receptor status, histology, tumour size, lymph node status, lympho-vascular invasion (LVI), C3 index

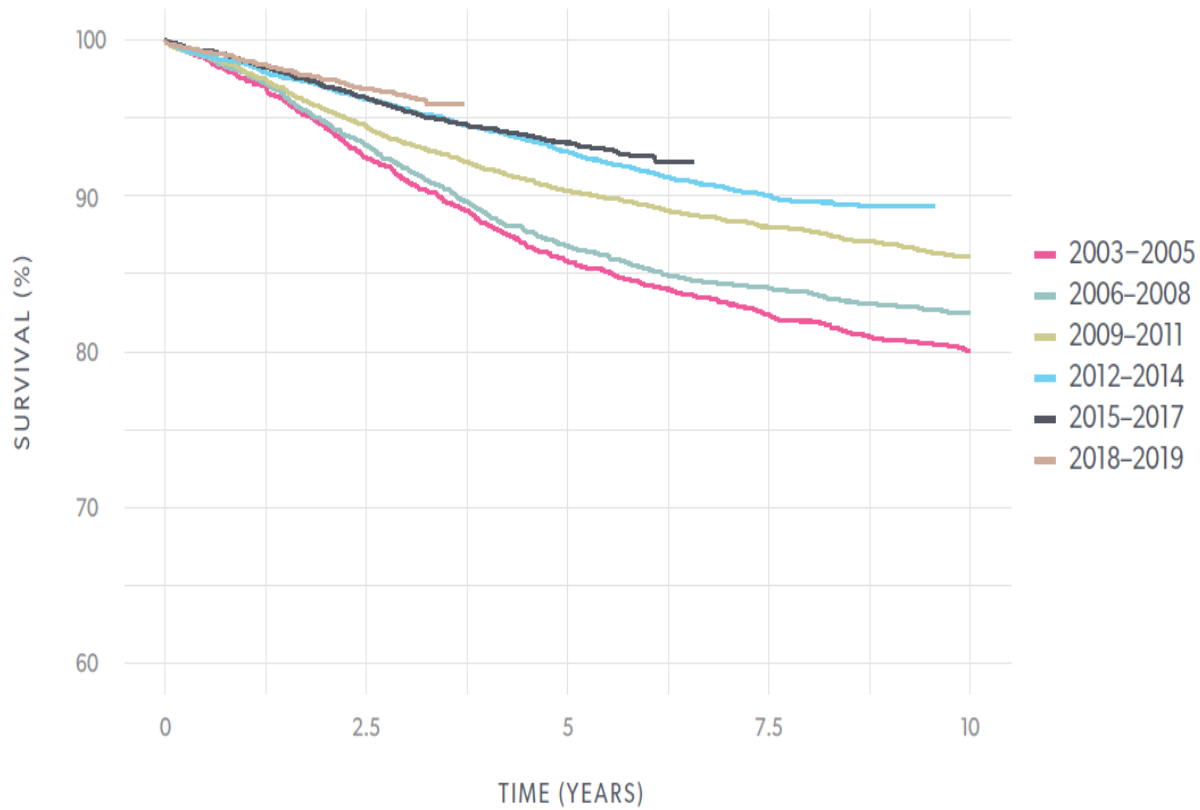
\*\*\*adjusted for demographic, clinic-pathological and systemic treatment factors: age, ethnicity, NZ dep, urban status, register, public/private, screen detected/symptomatic, grade, HER2, hormone receptor status, histology, tumour size, lymph node status, lympho-vascular invasion (LVI), C3 index, systemic treatment (hormonal and chemo-therapies)



# Treatment: Surgery – Use of axillary dissection



# Breast-cancer specific survival 2003-2019

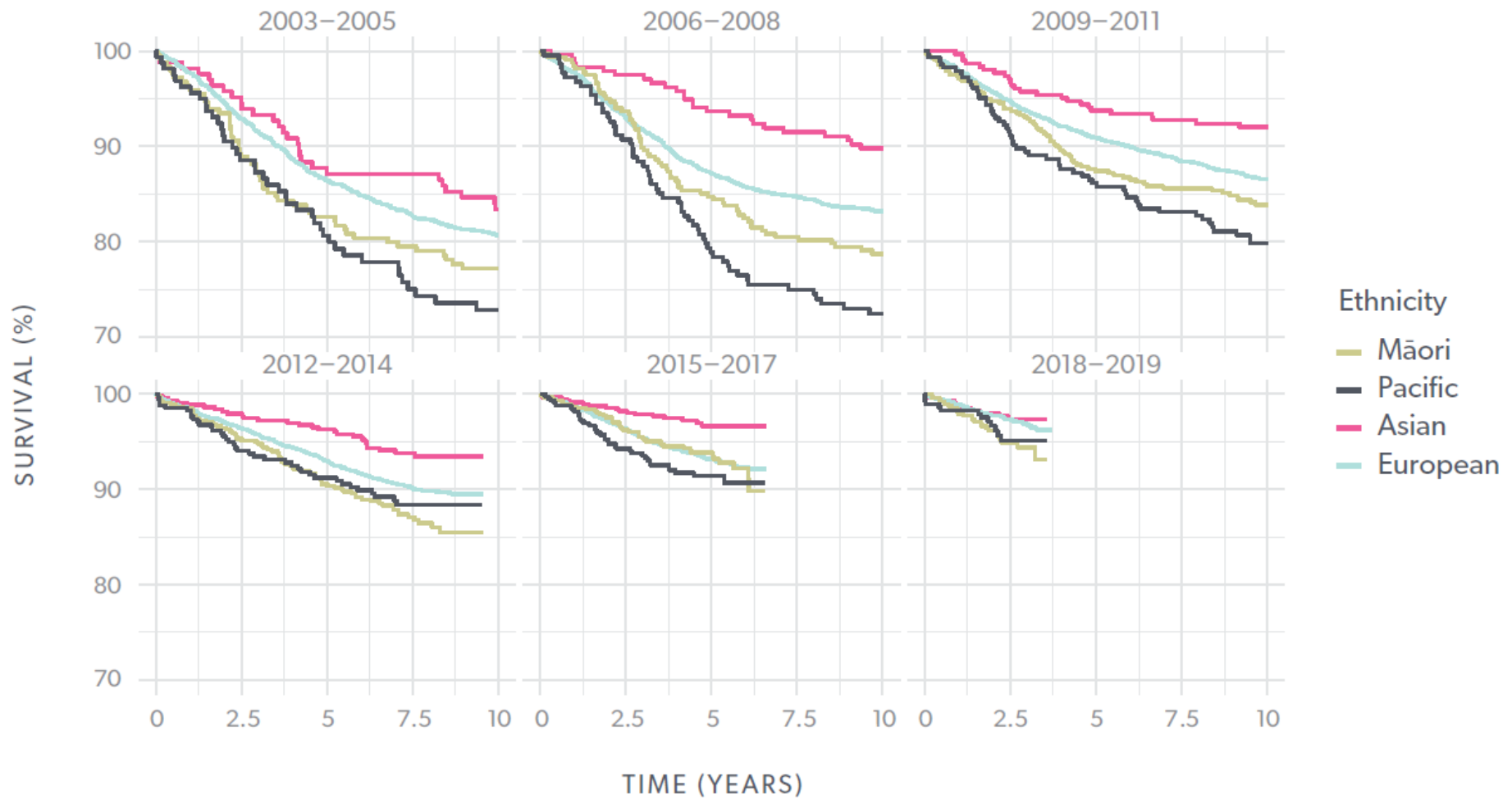


YEAR OF DIAGNOSIS	5-YEAR SURVIVAL	10-YEAR SURVIVAL
2003-2005	86% (84-87)	80% (78-82)
2006-2008	87% (86-88)	82% (81-84)
2009-2011	90% (89-91)	86% (85-87)
2012-2014	93% (92-94)	
2015-2017	93% (93-94)	

Country	Period	5 year	10-year	Survival	Notes
NZ	2009-2011	90.0%	86.0%	BCSS	Crude data
	2012-2014	93.0%		BCSS	Crude data
	2015-2017	93.0%		BCSS	Crude data
England	2010-2011	86.6%		Net survival	Age-standardised
	2013-2017	85.0%	75.0%		Age-standardised
Australia	2013-2017	91.5%		Relative	Crude data
Australia	2011-2015		85%	Relative	Crude data



# BCSS by ethnicity over time



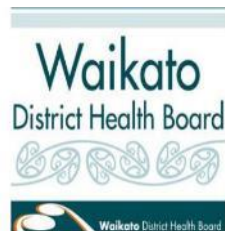
# Clinical trials in the Waikato



IBCSG 10-93, ANZ 9002 DCIS, **IBIS 1**, ATAC, **IES**,  
BIG 1-98, SNAC1, HABITS, ZO-FAST, Menstrual Cycle Study,  
**BCIRG 005**, **BCIRG 006**, **Communication study**, FACE,  
**IBCSG 23-01**, IBIS II (Prevention & DCIS), SOFT, TAILORx,  
BIG 2-98, SUPREMO, **SNAC 2**, LATER, SOLE, **ALTTO**, APHINITY,  
FERGI, **QoLID**, EORTC, **POSNOC**, **ELIMINATE**, ROLLIS, *EXPERT*  
Lymph node grafting, ALTTO, MonarchE, **ABCpro study**,  
**Persevera**, ...

Sub studies: **IBIS 1 QOL**, ATAC QOL, BIG 1-98 Fingernail study, **IBIS II Decision Aid and mammographic density**, **SNAC 2 DA**

Total: 700+ participants





# Acknowledgements

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**Thanks most of all to the 30,000 women and 181 men represented in the Register**

