

### Comparison of Australian real-world evidence (RWE) relating to multiple myeloma survival compared to other jurisdictions.

The Myeloma and Related Diseases Registry (MRDR) established in late 2012 affords access to comprehensive data relating to the diagnosis, treatment and outcomes of patients newly diagnosed with multiple myeloma (MM) and antecedent non-cancer disorders. There are currently >4500 patients on the MRDR with more than two thirds with a new diagnosis of MM. In the table below I have compared MRDR RWE to similar data from 4 jurisdictions with similar RWE and government-funded health systems. Many jurisdictions have no available data e.g. France, Spain, Germany, Italy or have fundamentally different health systems e.g. the US – a user pay/for-profit system characterised by inequity of access to care. The RWE varies between jurisdictions in how it is expressed but essentially what I have tried to show is overall survival outcomes (the time from diagnosis to death) either as a median or 5-year survival rates. I've also, to the best of my knowledge, included in the last column the number of available 'therapies' in each jurisdiction. I sought data from multiple other jurisdictions of interest but was unable to secure the data in the required time-frame.

	Time Period	Median Overall Survival (months)				5-year survival rates (%)				Therapies
		<65yrs	>65yrs	<70yrs	>70yrs	<65yrs	>65yrs	<70yrs	>70yrs	
<b>Australia<sup>1</sup></b>	2012-2020	78	54	77	49	66	45	63	39	6
<b>UK<sup>2</sup></b>	2004 - 2019			96	60			65	34	9
<b>Sweden<sup>3</sup></b>		116	49							9
<b>Norway<sup>4</sup></b>	2001 - 2020					72	50	67	40	8
<b>Japan<sup>5</sup></b>	2011 - 2015	NR	53			75				9

NR = not reached.

The relatively good performance in Australia based on 5-year survival when rates when compared to median overall survival may reflect relative uniformity in treatment approaches at diagnosis and first relapse but with fewer treatment options in Australia in later lines of therapy. Particularly in younger patients. Older patients rarely get treated beyond second relapse. There are also cultural differences, for example, in Japan the elderly are more likely to be palliated with more 'gentle' therapies.

<sup>1</sup> Myeloma and Related Diseases Registry, Monash University

<sup>2</sup> <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/myeloma>

<sup>3</sup> [https://cancercentrum.se/globalassets/cancerdiagnoser/blod-lymfom-myelom/myelom/myelomrapport7\\_final.pdf](https://cancercentrum.se/globalassets/cancerdiagnoser/blod-lymfom-myelom/myelom/myelomrapport7_final.pdf)

<sup>4</sup> Courtesy of Dr Fredrik Schejesvold, Oslo Myeloma Centre

<sup>5</sup> Professor Shinsuke Iida, Nagoya City University Graduate School of Medicine