

# An analysis of currently active clinical trials registered on the Australia New Zealand Clinical Trials Register (ANZCTR) as at 28<sup>th</sup> February 2020, and the US clinicaltrials.gov register as at 17<sup>th</sup> March 2020.

## Introduction

This paper was prepared in response to an NZHR member wishing to understand the current clinical trials landscape in New Zealand hospitals.

## Methodology

The methodology comprises and an analysis of currently active clinical trials as recorded on the ANZCTR as at 28<sup>th</sup> February 2020, and on clinicaltrials.gov as at 17<sup>th</sup> March 2020. The initial stage of the analysis involved a search of the ANZCTR register based on the cascading selection of the following fields:

1.	All ANZCTR and clinicaltrials.gov trials	N = 1690
2.	In New Zealand only	
3.	Ethics approved	
4.	“Recruiting” + “active but not recruiting” (ie excluding “not yet recruiting”)	N = 1295
5.	Trials with a start date of 01/01/2015 or later	N = 771
6.	ANZCTR only trials (ie excluding clinicaltrials.gov trials)	N = 419
7.	Clinicaltrials.gov trials identified on ANZCTR	N = 352

Step 5 was undertaken because the ANZCTR does not reliably record trials that have been completed or discontinued. The paper assumes that “active” trials with a start date prior to 1<sup>st</sup> January 2015 will most likely no longer be active, with the requirement for the trial to be recorded as no longer active having been overlooked. It is likely that there will be a number of trials with a start date of after 1<sup>st</sup> January 2015 which are in fact inactive, and that the figure of 771 therefore overstates the actual number of currently active trials.

It was not possible to reliably further search the ANZCTR register based on existing fields to identify trials undertaken in a hospital/DHB setting. The data on the 419 trials identified above was downloaded onto a spreadsheet using the facility incorporated into the ANZCTR search function, and each record was individually

scrutinised to determine whether or not a New Zealand hospital or other DHB facility was recorded as a trial site. This was recorded on the spreadsheet which then enabled further analysis and generation of results.

A hospital by hospital search of the [clinicaltrials.gov](https://clinicaltrials.gov) register was also undertaken, as follows:

- Every main centre and main provincial hospital was entered individually into the “search term” field, ensuring inclusion of different names for the same hospital (eg Auckland Hospital and Auckland City Hospital), and exclusion of hospitals located overseas with the same name as a New Zealand hospital (eg North Shore Hospital)
- For each hospital a search was conducted using the following criteria: interventional studies; recruiting; active but not recruiting
- The search results for each hospital were downloaded into separate individual pdf files; these files were analysed manually to identify each trial’s primary therapeutic area. As [clinicaltrials.gov](https://clinicaltrials.gov) permits a maximum of 100 trials only to be downloaded, the search results of additional trials above this limit were identified and recorded manually

## Results

1.	ANZCTR only trials (ie excluding <a href="https://clinicaltrials.gov">clinicaltrials.gov</a> trials)	N = 419
2.	No of ANZCTR only trials with hospital/DHB involvement	N = 177 (42%)
3.	Sponsorship/funding of ANZCTR only trials with hospital/DHB involvement	<ul style="list-style-type: none"> <li>• DHB/hospital = 43 (24%)</li> <li>• University = 52 (29%)</li> <li>• Commercial = 17 (10%)</li> <li>• Individual = 31 (18%)</li> <li>• Other = 34 (19%)</li> </ul>
4.	Trials based on directly searching <a href="https://clinicaltrials.gov">clinicaltrials.gov</a>	N = 625

With only a few exceptions there was insufficient information provided on the ANZCTR to provide a breakdown of the 177 hospital/DHB trials by individual hospital/DHB. The perception from the individual scrutiny of the 419 ANZCTR records is that most of the 177 hospital/DHB trials occur in the main (as opposed to provincial centres).

Results from the two searches are combined in Tables 1 and 2 below.

Table 1. clinicaltrials.gov trials by hospital and therapeutic area + ANZCTR trials by therapeutic area

hospital	No of trials	cancer <sup>1</sup>	bowel colon Crohns colitis	cardiac	muskulo- skeletal	arterial	hepa biliary	renal	pulmonary respiratory	neonatal	neuro- logical	intensive & critical care	surgery	other
Whangarei	1							1						
Auckland	144	76	7	12		20	10	5	1	3	2	2	1	5 <sup>2</sup>
Starship	41	37						1						3 <sup>3</sup>
North Shore	23	19	3						1					
Middlemore	38 <sup>4</sup>	6	2	5	5	4	4	1	1	2		2	1	5 <sup>5</sup>
Waikato	89	21	16	12	12	3	4		4	2	4	1	1	9 <sup>6</sup>
Rotorua	5	1		1								1		2 <sup>7</sup>
Tauranga	28	13	9	1					1			1		3 <sup>8</sup>
Taranaki	6	1		2				1						2 <sup>9</sup>
Gisborne	0													
Hawkes Bay	1							1						
Whanganui	0													
Palmerston North	19	19												
Hutt	5		3	1										1 <sup>10</sup>
Wellington	87	27	13	9	5	1	1	3	2	2	3	3	1	17 <sup>11</sup>
Nelson	2			1										1 <sup>12</sup>
Grey	1												1	
Christchurch	103	53	13	9	4		4	2	3	2	2	2		9 <sup>13</sup>
Timaru	2				2									
Dunedin	30	7	13	3	1		1	1	2	1	1			

<sup>1</sup> See following page for further detail

<sup>2</sup> Sepsis, CMV, pneumonia, hypovolaemia, haemophilia, wounds 1 each;

<sup>3</sup> CF, bronchiolitis one each

<sup>4</sup> 56 for search term "Middlemore" only

<sup>5</sup> lipids 2; bacteremia 1; hypovolemia 1; burns 1

<sup>6</sup> lupus, cough, CDI, MCRPC, flu, sepsis, bacteremia, hypovolemia, lipid one each

<sup>7</sup> Influenza A; hypovolemia

<sup>8</sup> Flu 2; hypovolaemia one

<sup>9</sup> Clostridium infection; bacteremia

<sup>10</sup> hypovolemia 1

<sup>11</sup> Flu 4; fragile X 2; acromegaly 3; huntingtons 1; stroke 1; sepsis 1; vascular 1; hypovolaemia 1; respiratory 2; skin 2; sinusitis 1

<sup>12</sup> hypovolemia

<sup>13</sup> stroke 2; flu, pharmacokinetics, sepsis, hypovolemia, ophthalmology, CF, diabetes one each

hospital	No of trials	cancer <sup>1</sup>	bowel colon Crohns colitis	cardiac	muskulo- skeletal	arterial	hepa biliary	renal	pulmonary respiratory	neonatal	neuro- logical	intensive & critical care	surgery	other
Southland	0													
CTG subtotals	625	280	79	56	29	28	24	16	15	12	12	12	5	57
ANZCTR trials	177	30	7	11					6	23		8	45	47 <sup>14</sup>
Grand totals	802	310	86	67	29	28	24	16	21	35	12	20	50	104

Table 2. clinicaltrials.gov cancer trials by hospital and therapeutic area

hospital	No of trials	leukaemia	breast	lung	lymphoma	neuro brain	prostate	gynae	solid tumour	renal	liver biliary	gastro	melanoma	germ cell	uro bladder	head neck	other
Whangarei																	
Auckland	76	2	8	8	8		6	7	9	3	7	4	4	1	2	2	5 <sup>15</sup>
Starship	37	13		1	1	10				1	1			2			8 <sup>16</sup>
North Shore	19	4	3	3	3		2	1				2			1		
Middlemore	6	3			2			1									
Waikato	21	2	8	2	2		1	1		2		1			1	1	
Rotorua	1		1														
Tauranga	13	2	3	4				1		1			2				
Taranaki	1	1															
Gisborne	0																
Hawkes Bay	0																
Whanganui	0																
Palmerston North	19	2	4	3	3		3	1		1				1			1 <sup>17</sup>
Hutt	0																

<sup>14</sup> Maternity 7; Stroke 6; Rehabilitation 5; other 29

<sup>15</sup> spinal 1; neoplasms 2; not specified 2

<sup>16</sup> Glioma 3; rhabdosarcoma 2; malignant neoplasm, ewing, bone one each

<sup>17</sup> Pharynx 1

hospital	No of trials	leukaemia	breast	lung	lymphoma	neuro brain	prostate	gynae	solid tumour	renal	liver biliary	gastro	melanoma	germ cell	uro bladder	head neck	other
Wellington	27	4	4	5	3	1	1	2	4	1			1			1	
Nelson	0																
Grey	0																
Christchurch	53	13	4	2	5	6	3	1	1	3	3	1	1	3	2	1	4 <sup>18</sup>
Timaru	0																
Dunedin	7	2					1		1			1		1			1 <sup>19</sup>
Southland	0																
<b>Total</b>	<b>280</b>	<b>48</b>	<b>35</b>	<b>28</b>	<b>27</b>	<b>17</b>	<b>17</b>	<b>15</b>	<b>15</b>	<b>12</b>	<b>11</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>5</b>	<b>19</b>

<sup>18</sup> ewings sarcoma, bone, 1 each; rhabdosarcoma 2

<sup>19</sup> Colorectal 1

## Concluding comments

Analysis of ANZCTR data has proven to be neither an effective nor an efficient method of understanding the clinical trials landscape at anything other than a high level for the following reasons:

- inconsistencies between the ANZCT and clinicaltrials.gov fields and register structures (as illustrated in table 3 below)
- No requirement for trials being undertaken in New Zealand to be registered with the ANZCTR (they merely have to be registered on a WHO approved register)
- Inconsistent and ambiguous use of fields by those registering trials with ANZCTR
- No field within the structure of the register specifying actual trial sites
- No requirement for trials to be registered as inactive after the conclusion or discontinuation of the trial

This means that to comprehensively understand the current clinical trials landscape in New Zealand hospitals it would be necessary to collect the information directly from DHBs themselves. As it is expected that the soon to be commissioned HRC/MoH funded clinical trials report will be undertaking its own (and possibly more extensive) survey of DHBs, and that DHB CEOs have been specifically briefed on the requirement to engage with this exercise, NZHR has elected not to attempt its own analogous exercise at this time.

Table 3: clinicaltrials.gov numbers via ANZCTR and directly from clinicaltrials.gov

1.	clinicaltrials.gov trials on ANZCTR	N = 352
2.	trials on those not classified as healthy volunteers	N = 331
3.	associated with commercial sponsorship	N = 284
4.	classified as “treatment trials”	N = 267
5.	surgery treatment trials	N = 8
6.	Trials based on directly searching clinicaltrials.gov	N = 625

21<sup>st</sup> April

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