

## Introduction

- Chemotherapy induced peripheral neuropathy (CIPN) is a prevalent (30%-68%) and serious side effect of neurotoxic chemotherapy (1,2)
- No therapeutic options available to prevent CIPN (3)
- Ongoing clinical trials and unpublished studies are rarely included in Systematic Reviews (SR) (4-6)
- 40-50% studies are unpublished. Publication bias impacting reliability and validity of SR (4-6)
- Essential to review data from clinical trial registries:
  - Assist in decision making about whether additional studies are needed in a particular area (4-6)
  - Synthesize the evidence to avoid publication bias and duplication of the same studies (4-6)
- As part of a SR to identify preventive measures for CIPN in adults undergoing chemotherapy, the aim of this study was to appraise the evidence from clinical trials and unpublished studies in clinical trial registries

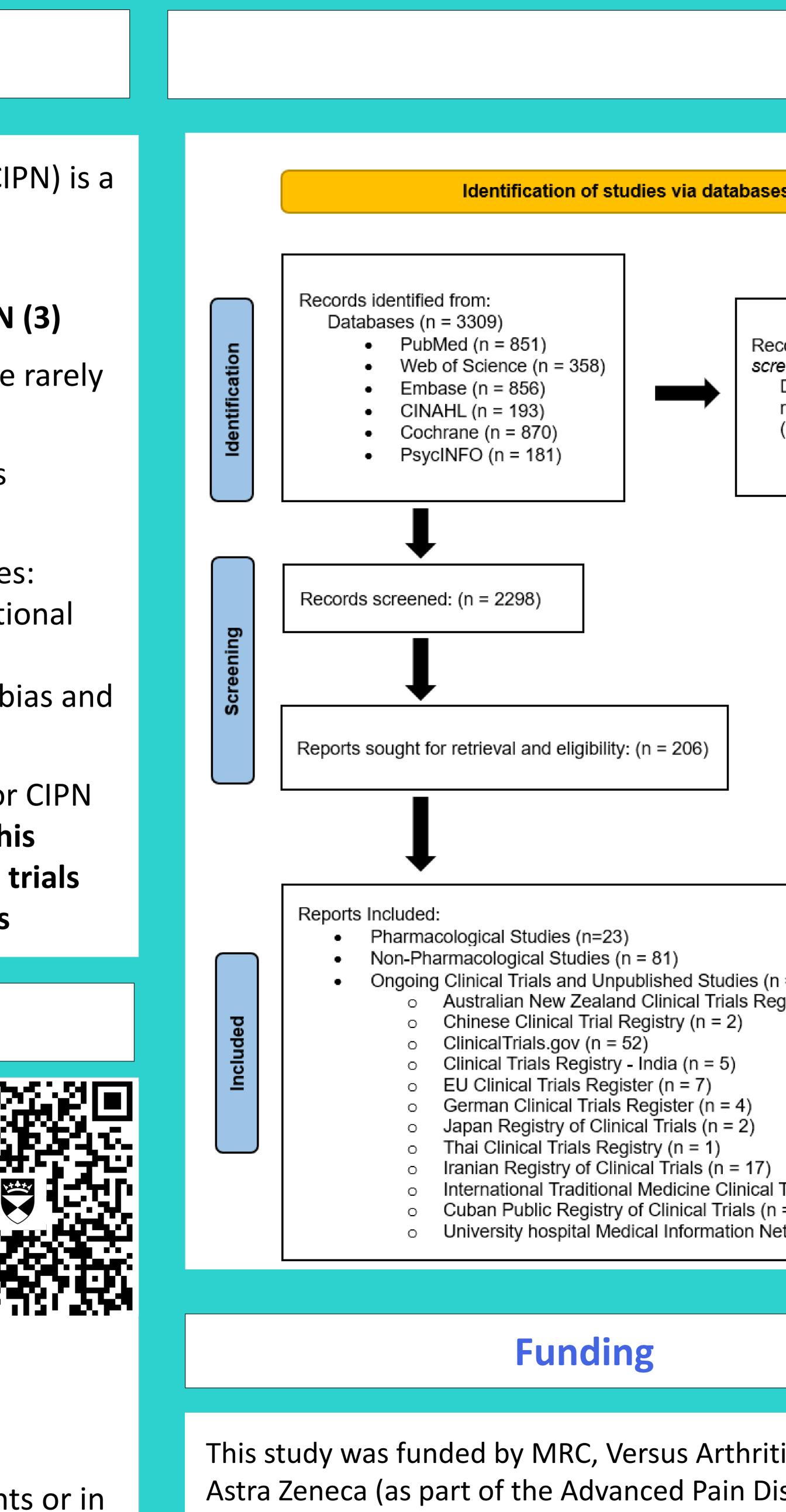
## **Methods**

- QR code to PROSPERO registration details
- BT, AC and MG screened the titles and abstracts on Covidence, and any conflicts were resolved by LC

- Risk of bias assessment
  - NIH quality assessment item tool
  - 2 independent reviewers (BT/ AC)
- Studies that were registered and had completed recruitment but did not publish results via preprints or in journals were included in unpublished studies.

# **Ongoing Clinical Trials & Unpublished Studies to Prevent Chemotherapy Induced Peripheral Neuropathy**

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Platform) for PAINSTORM (MR/W002388/1) ai (MR/W002566/1)

		Results
cords removed <i>before</i> <i>eening</i> : Duplicate records removed (n = 1011)		<ul> <li>Status of studies on clinical trial registries: <ul> <li>Recruiting (n = 26)</li> <li>Not recruiting (n = 13)</li> <li>Completed Recruitment (n = 46)</li> <li>Terminated/Suspended (n = 11)</li> <li>Unknown status (n = 6)</li> </ul> </li> <li>Lack of funding, low recruitment and adverse drug related events were causes for studies being terminated early</li> <li>Pharmacological therapies to prevent CIPN (Duloxetine, metformin, melatonin, acetyl-L-carnitine, Amitriptyline, glutamine and other agents)</li> <li>Non-pharmacological approaches include (Compression, cryotherapy, frozen gloves, exercise, vitamins B6/B12, and acupuncture)</li> <li>93% agreement between the two assessors with majority of the studies being of either 'good' or 'fair' quality.</li> </ul>
		Conclusions
n = 102) gistry (n = 4)		<ul> <li>In 2020, ASCO guidelines (3) discouraged use of acetyl-L-carnitine and NO RECOMMENDATIONS were made for all the agents currently being studied.</li> <li>Typically, only clinical trials with positive results, or large effect sizes get published and data from unpublished studies is omitted from SRs which contributes to research bias.</li> </ul>
Trial Registry (n = 1) = 1) etwork (UMIN) Center (n =	= 6)	<ul> <li>Hunter et al. recently published guidelines on searching for registered studies and including them in SRs (5)</li> </ul>
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		Conflict of Interest Statement References
is, Eli Lilly, and scovery and CAPE		<ul> <li>All authors report no conflict of interest</li> <li>1. Seretny M, Currie GL, Sena ES, et al. PAIN 2014; 155:2461–70.</li> <li>2. Colvin, Lesley A. PAIN 2019.160:p S1-S10.</li> <li>3. Loprinzi CL, Lacchetti C, Bleeker J, et al. J Clin Oncol 2020; 38:3325–48.</li> <li>4. Jones et al. Systematic Reviews 2014, 3:126.</li> <li>5. Hunter K E, Webster A C, Page M J, et al. BMJ 2022; 377 :e068791</li> <li>6. Schmucker C, Schell LK, Portalupi S, et al. PLoS ONE (2014). 9(12): e114023.</li> </ul>





### **Poster Number: WE510**