



Examining The Potential Influence Of Industry Payments On Allograft And Conduit Nerve Repair Outcomes



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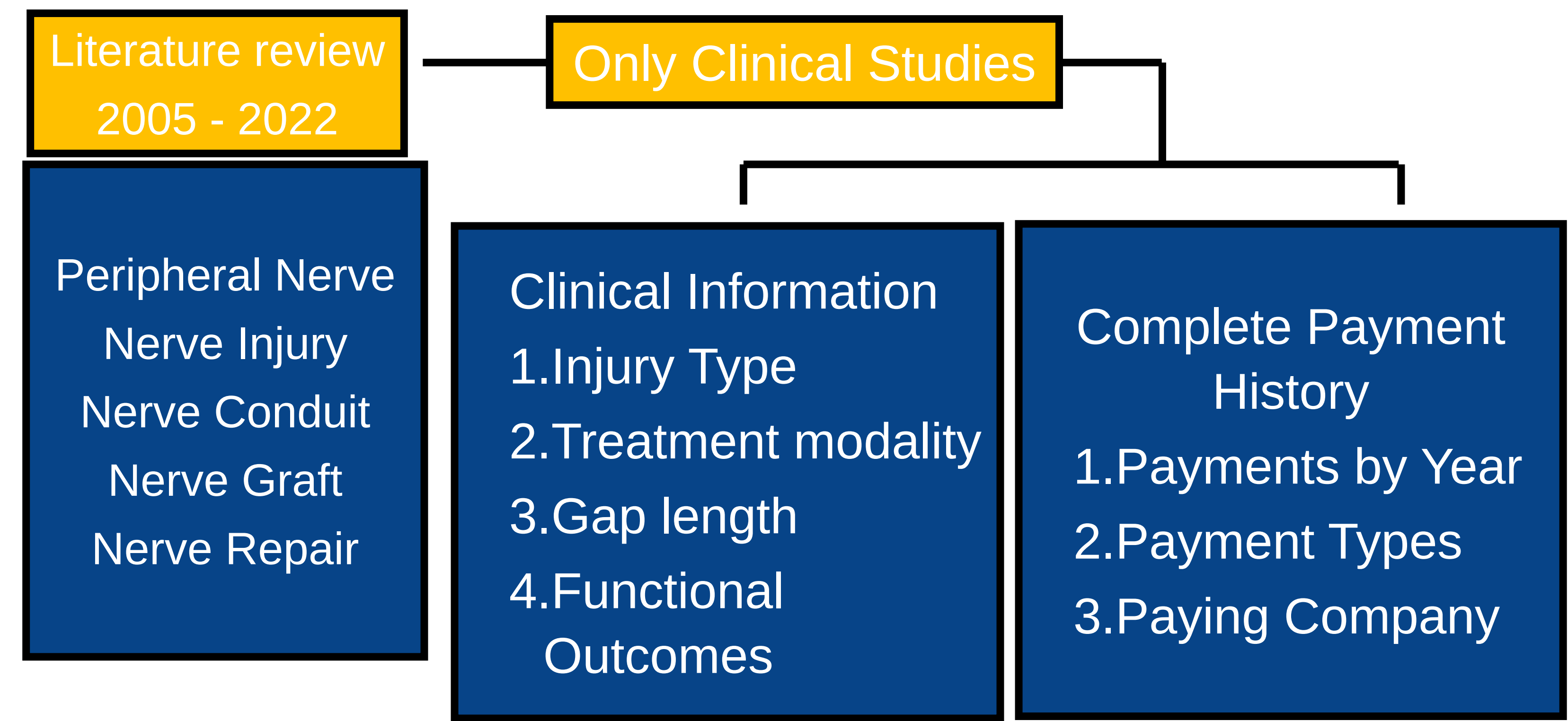
Background

There are several industry-based solutions for nerve gaps. Currently available options include clinical standard autografting, the use of biodegradable nerve conduits, and lastly, processed nerve allografts.

We asked: is there an association between industry payment to study authors and the reported outcomes after nerve grafts and conduits?

Methods

- Our literature review covered years 2005-2022 using the search terms: Peripheral nerve, nerve injury, nerve conduit, nerve graft, and nerve repair.
- Clinical studies with detailed information were included.
- Information concerning injury type, treatment modality, gap length, and functional outcomes were collected.
- Lastly, each author’s industry related payments were pooled from Open Payments Database and payments made by nerve repair companies were collected.



A-Study Information

Article Number	Journal	Year	Treatment	Number of Patients
1	J Hand Surg	2013	Allograft	14
2	AAHS	2009	Allograft	7
3	J Hand Surg	2011	Allograft & Conduit	19
4	World Neurosurgery	2019	Allograft & Conduit	37
5	Surgical Onco and Recons	2017	Allograft	18
6	AAHS	2016 *	Allograft & Conduit	12
7	Surgical Onco and Recons	2016	Allograft	7
8	J PSHS	2013	Allograft	5
9	Hand	2017	Allograft	13
10	PRS GO	2021	Allograft	22
11	Journal of Hand Surgery	2015	Allograft & Conduit	98
12	Journal of Hand Surgery	2012	Allograft	56
13	PRS GO	2021	Allograft	21
14	Journal of Hand Surgery	2008	Conduit	12
15	PRS GO	2019	Allograft	20
16	PRS GO	2021	Allograft	14
17	Microsurgery	2012	Allograft	108
18	J Reconstr Microsurg	2015	Allograft	24
19	Annals of Plastic Surgery	2017	Allograft	28
20	Microsurgery	2020	Allograft	385

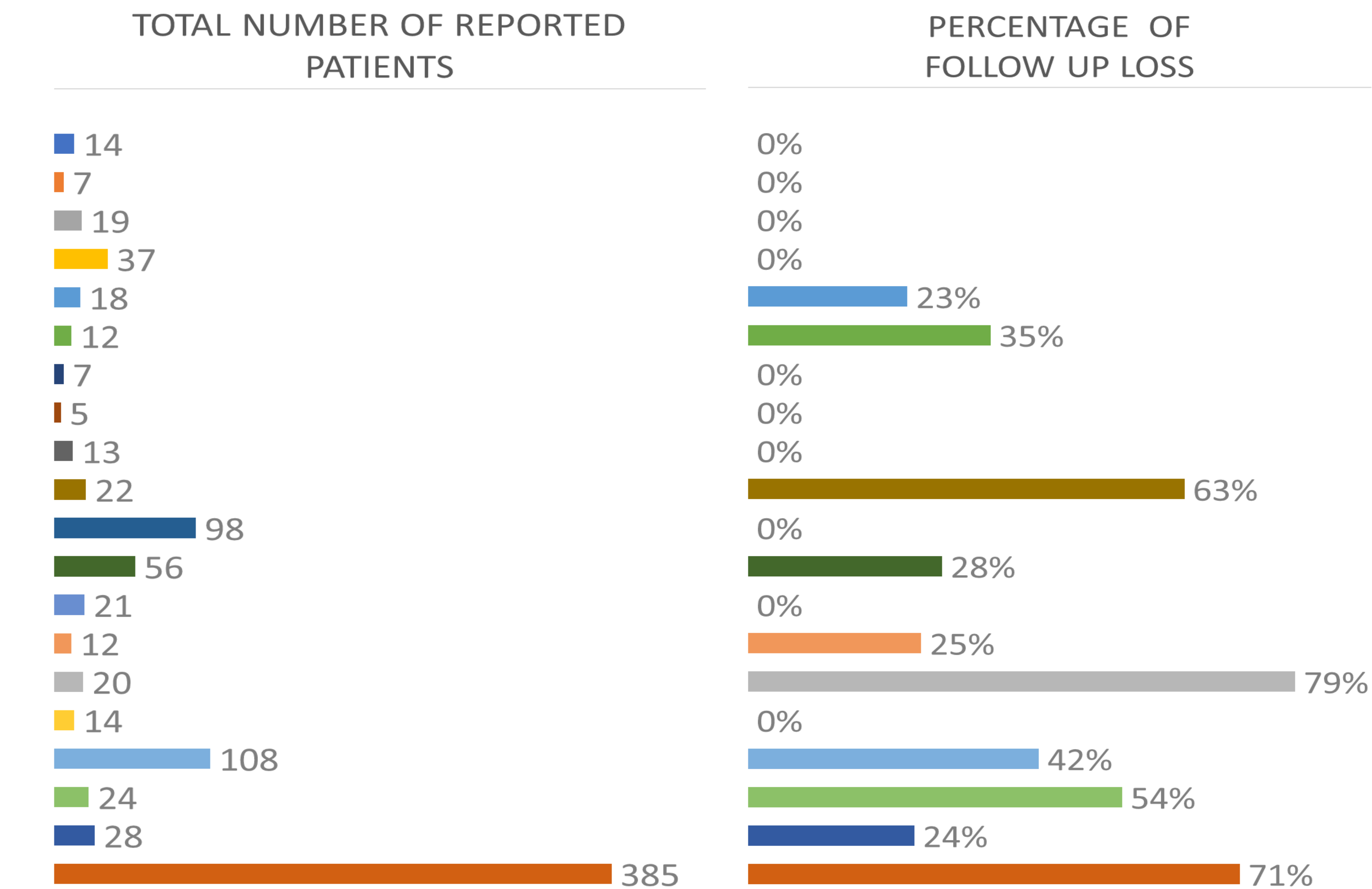
*= Randomized Controlled Trial

Results

C-Nerve Related Payments

Article Number	Number of Paid Authors	Net Amount (2013-2021)	Amount per Author
1	3	46,877	15,625.7
2	1	17,704.1	17,704.1
3	3	55,612.1	18,537.4
4	1	101,855.2	101,855.2
5	3	98,139.2	32,713.1
6	5	44,274.7	8855
7	3	50,417	16,805.7
8	1	103.2	103.2
9	2	260,224.2	130,112.1
10	3	21,392.7	7,131
11	6	644,612	107,435.4
12	7	431,120.5	61,588.6
13	6	1,086,214.7	181,035.8
14	4	218.4	54.6
15	9	677,791.8	75,310.2
16	1	456,009.8	456,009.8
17	14	455,165.8	32,511.8
18	6	643,680.4	107,280
19	8	883,548.7	110,443.6
20	16	1,315,645.5	82,227.8

C-Sample Size and Follow Up Loss



Conclusion

- All researchers received payments from the industry. The total amounts varied significantly among groups and authors.
- There are no randomized controlled trials that compare autografts to nerve conduits or processed nerve allografts.
- Largest studies lacked detailed follow up visits for most reported patients.
- Overall, the current available literature supports the use of these engineered devices.

All 20 papers included authors who received some payment from Industry. Non-industry supported clinical trials are needed to determine if there is a cost-benefit to using nerve allografts or conduits.