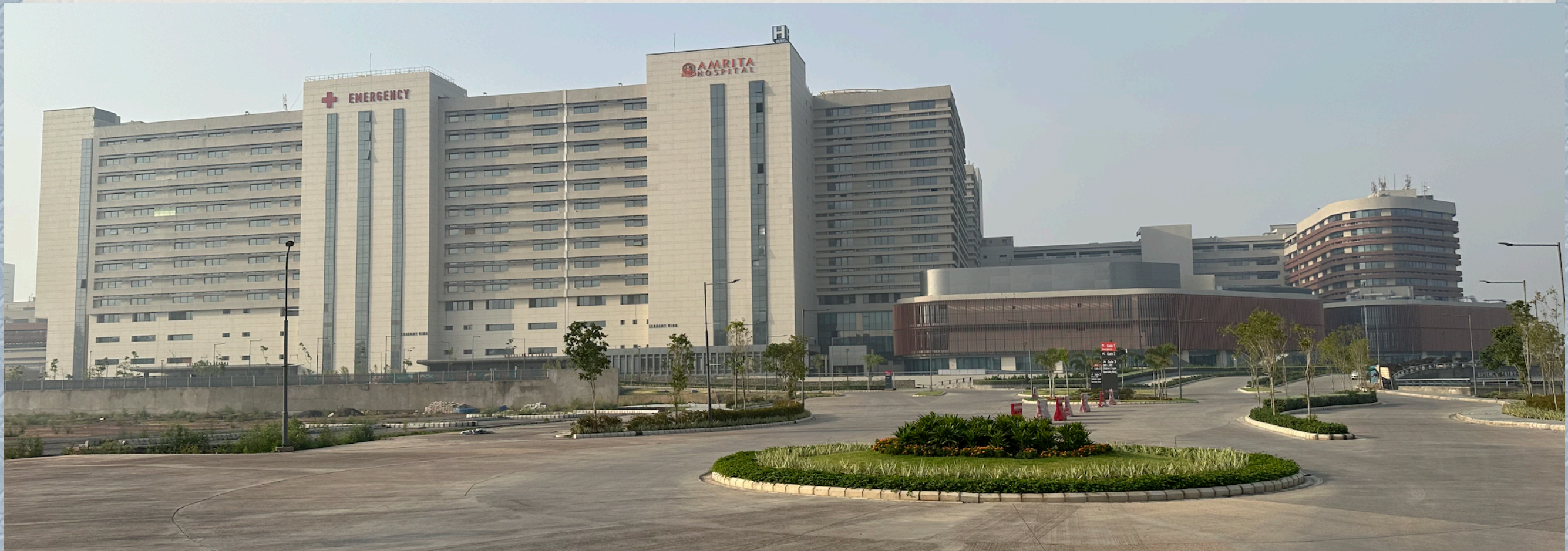


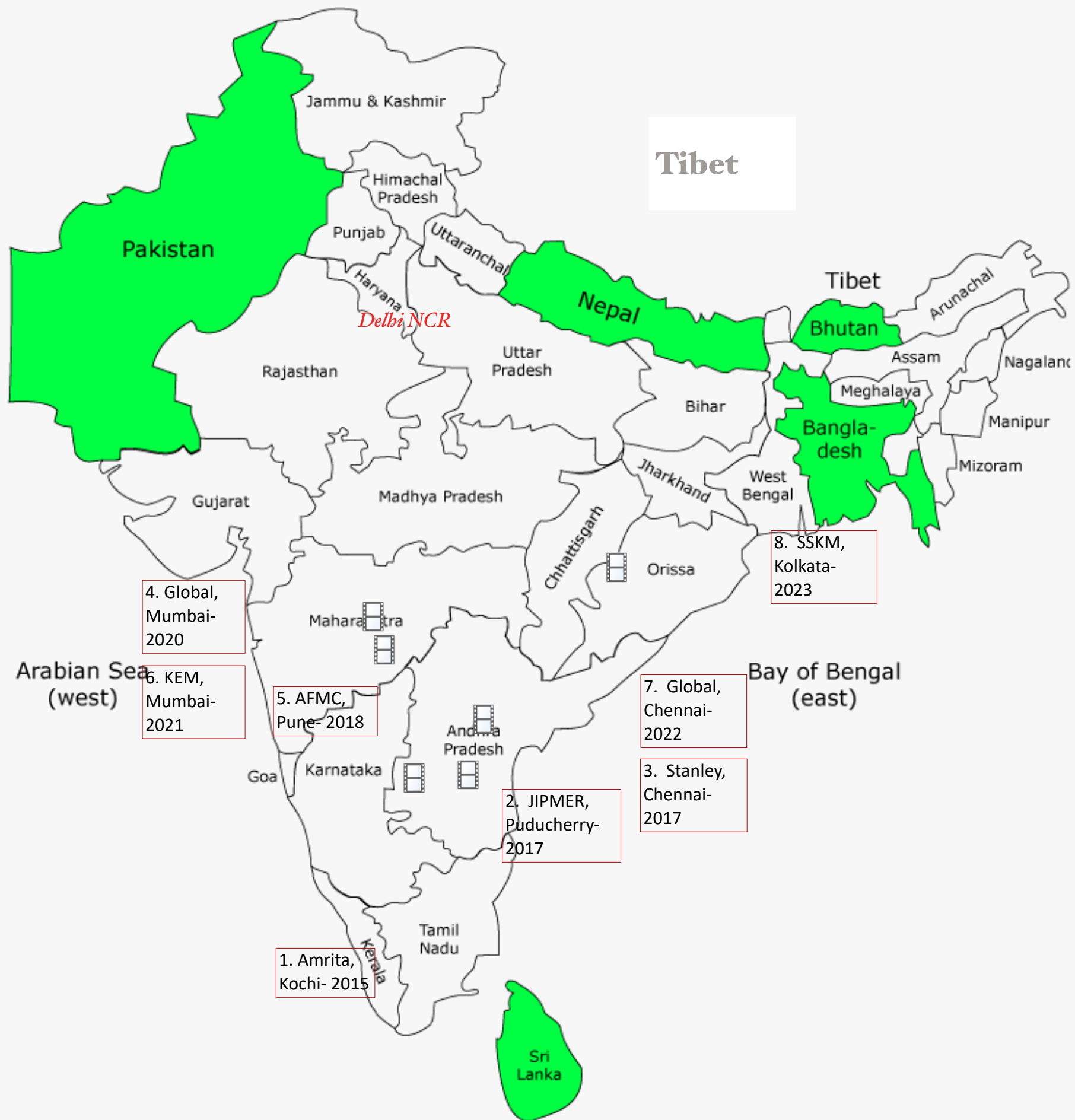
NASEM STUDY

Development of protocols and SOPs for hand transplantation

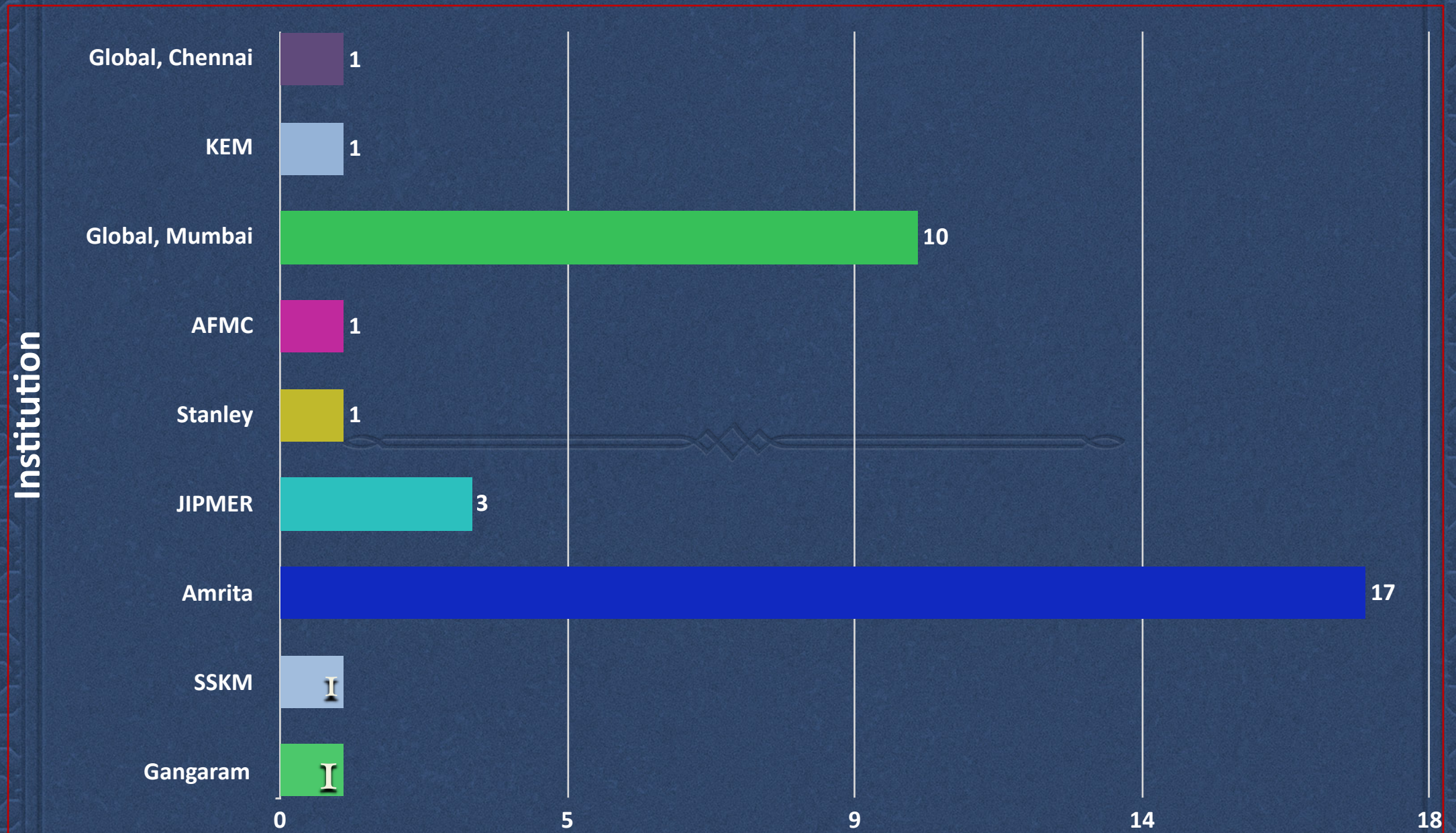
Mohit Sharma
Professor and Head
Plastic and Reconstructive Surgery
Amrita Hospital ,Faridabad, India







Upper extremity transplantation – Indian Institutions

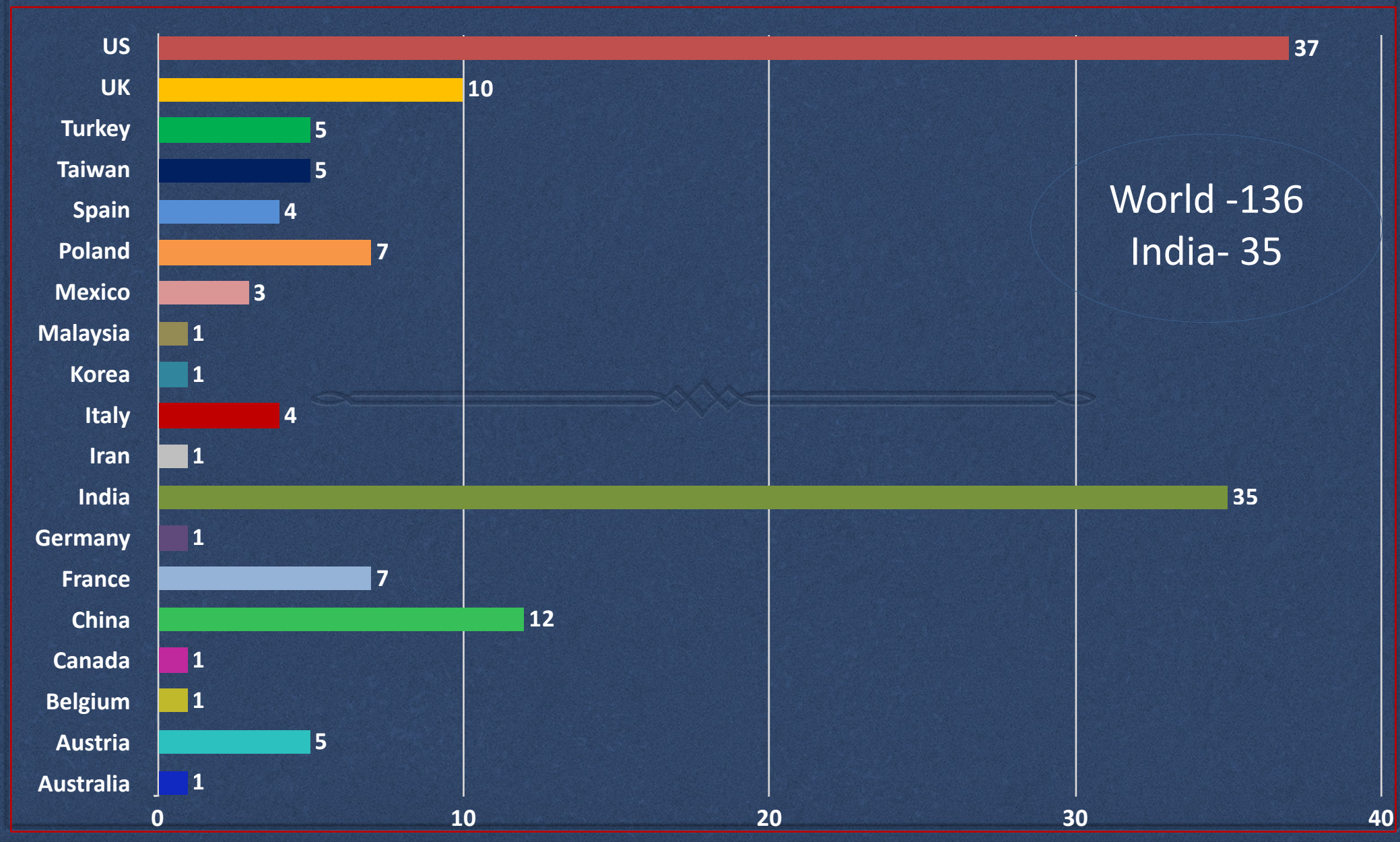


Patient	Age/ Sex	Level of transplant		Transplant
		Right	Left	
1 Manu	37/M	Distal Forearm	Distal forearm	2015
2 Abdul	37/M	Distal Forearm	Distal forearm	2015
3Jithkumar	26/M	Proximal forearm	Proximal forearm	2016
4Shreya	23 / F	Supracondylar	Supracondylar	2017
5Lingaselvi	49/F	Proximal forearm	Proximal forearm	2018
6Prasad	37/M	Proximal forearm	Upper arm	2019
7Menaga	52/ F	Mid arm	Mid arm	2020
8Eslam	25/M	Proximal forearm	Proximal forearm	2020
9Basavana	34 / F	Proximal forearm	Proximal forearm	2021
10Amaresh	24/M	Shoulder Level	Supracondylar	2022
11Yousef	28/M	Supracondylar	Supracondylar	2022
12 Gulnera	40/F	Supracondylar	Supracondylar	2022
13Raghav prakash	38/M	-	Supracondylar	2023
14Shefin Francis	36/M	Distal	Proximal forearm	2023
15 Gautam Tayal	64/M		Distal forearm	2023
16 Devansh Gupta	19/M	Proximal arm	Supracondylar	2023
17Nidhi Jain	23/F	Proximal forearm	Supracondylar	2024

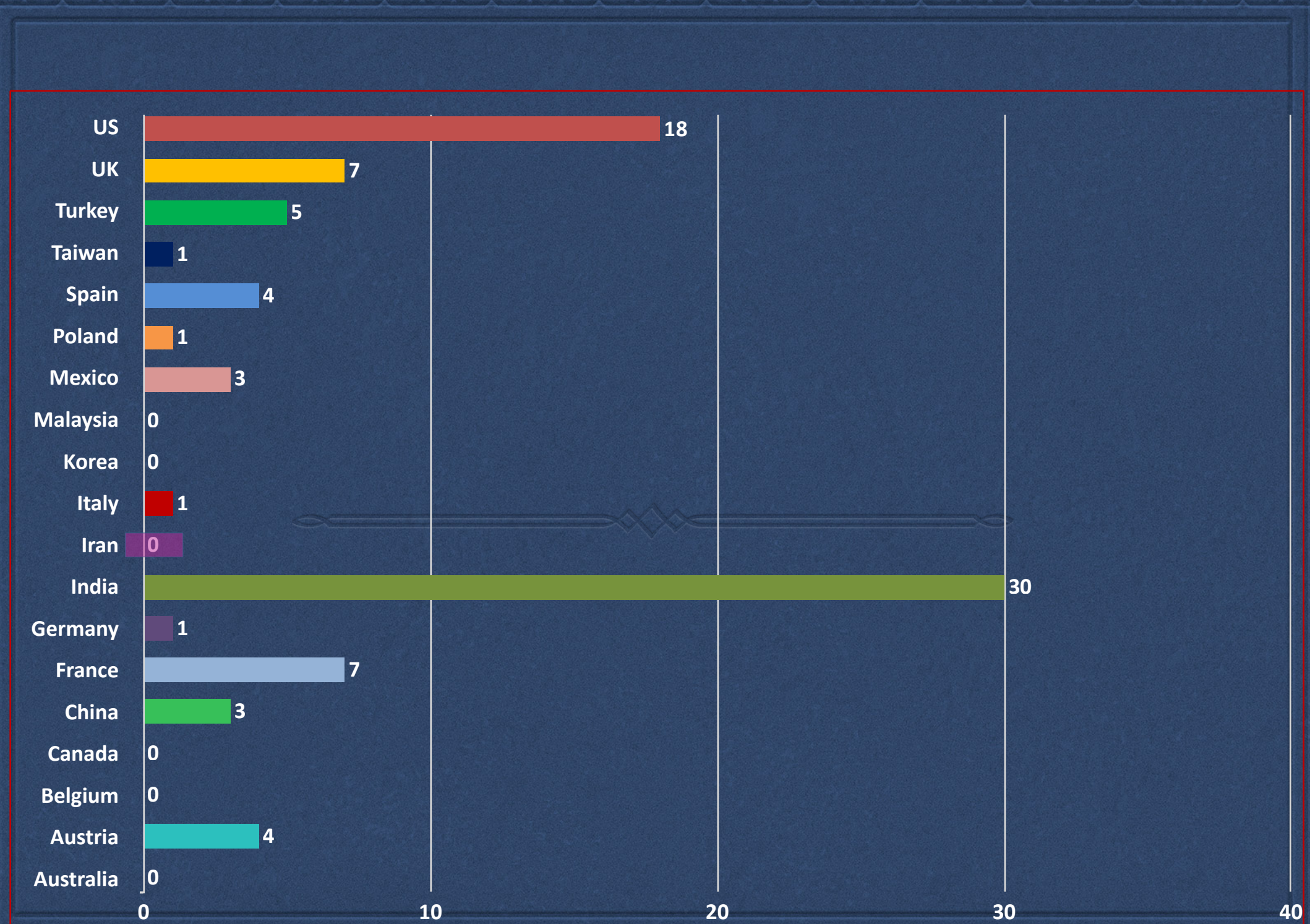
Where do we stand?

- *Numbers*
- *Cost and affordability*

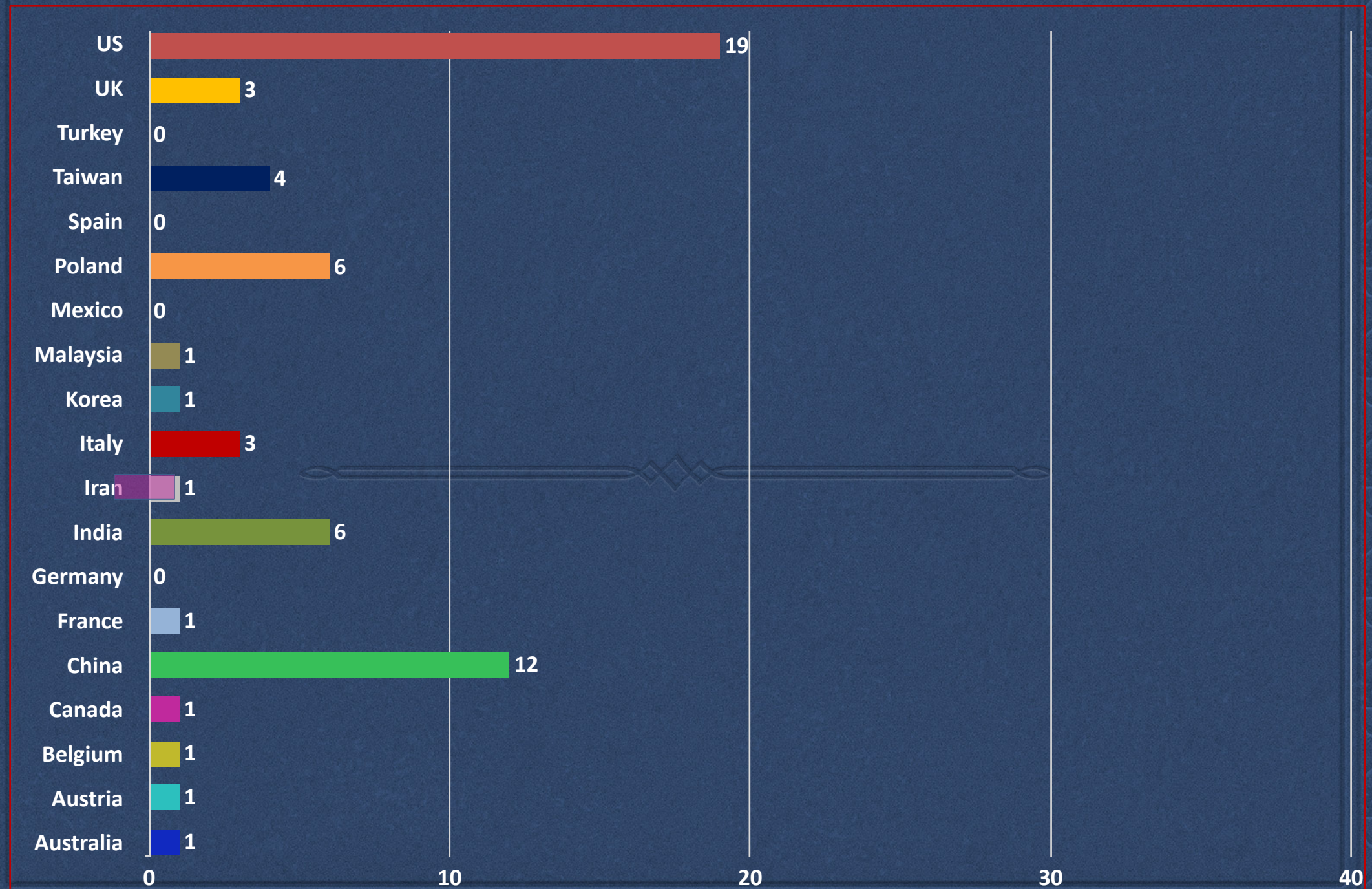
Upper extremity transplantation – India vs World- Total Patients



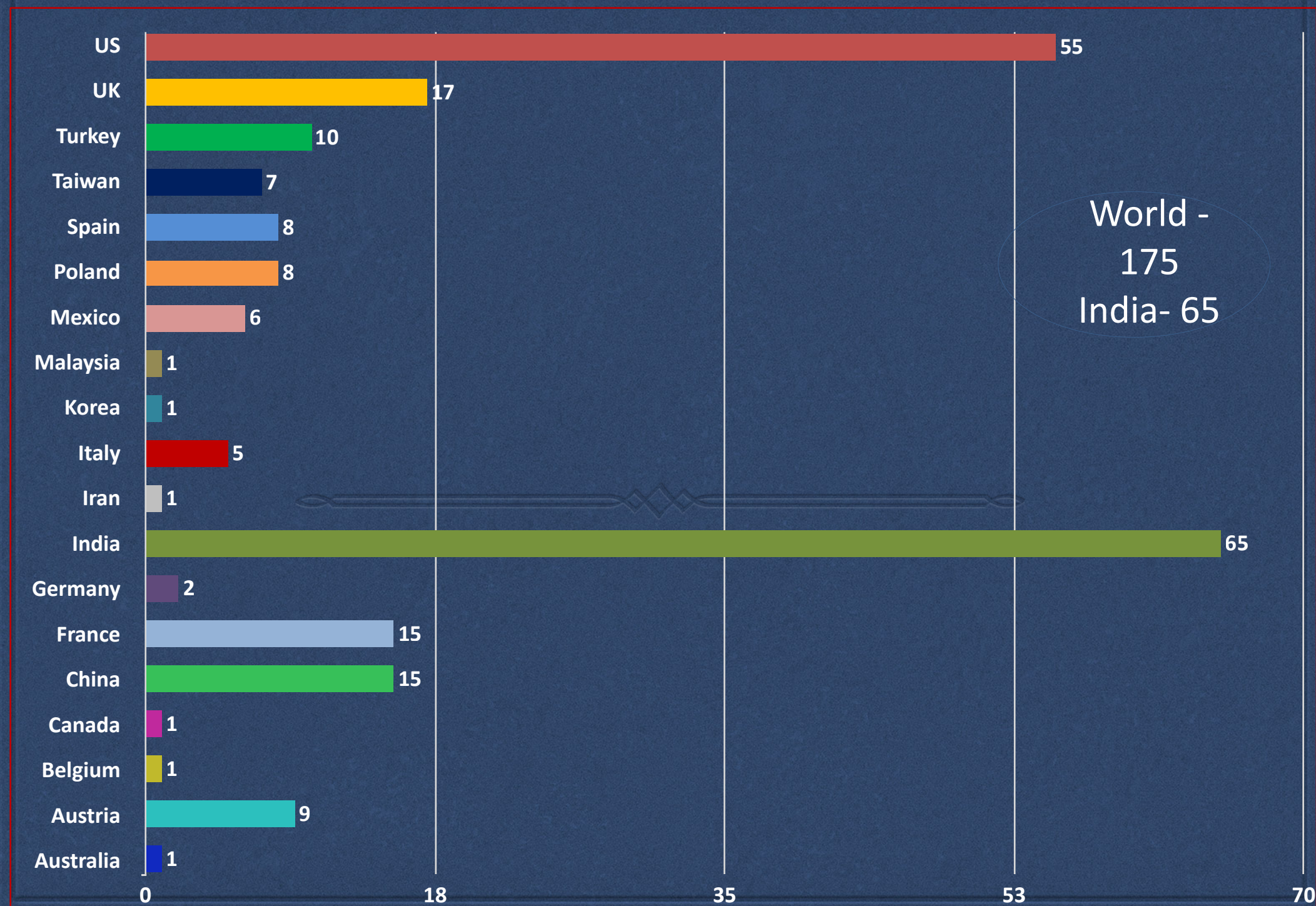
Upper extremity transplantation – India vs World- Bilateral



Upper extremity transplantation – India vs World- Unilateral



Upper extremity transplantation – India vs World- Total Limbs



Cost analysis- Hand transplants in India

- ✿ *Private institutions-* 30000 -35000\$
- ✿ *Government institutions-* Free of cost to the patient
- ✿ *Annual Cost of immunosuppressants and investigations*
2500-3000\$
- ✿ *Annual cost of physiotherapy and occupational therapy*
3500 -4000\$



Meeting agenda

- Patient inclusion/exclusion criteria,
- Patient education,
- Surgical procedures,
- Rehabilitation,
- Immunosuppression and/or immunoregulation,
- Outcome metrics,
- Quality of life measures, and
- Patient reporting (e.g., registry).

Issue with VCA-Uniqueness

- ✦ *Different levels*
- ✦ *Different rates of functional recovery*
- ✦ *Different timings of*
TAC levels, Protocol biopsies
- ✦ *Immunosuppression*
- ✦ *Rehabilitation*
- ✦ *Documenting and monitoring complications*
- ✦ *Secondary procedures*

VCA

- ✿ *Standards are required*
- ✿ *Extremely challenging to formulate*
- ✿ *Create a process -where transplants can be done in needy*
- ✿ *Making it affordable*
- ✿ *Create a generalisable value for standards development*

Consort grant

- *Supporting only 12 transplants in 6 years with*
- *\$300000/patient*

Why numbers matter



- ✿ *Higher numbers in India and in other centres around the world*
- ✿ *Implementation of standards to get generalised data*

Standards

- ✿ *Development*
- ✿ *Implementation*
- ✿ *Generalizable data*
- ✿ *How the standards are working? Success and Failure?*
- ✿ *Huge need for more numbers to be able to standardise*

Reconstructive transplant research program clinical network

- ✿ *We are here to help you develop the standards*
- ✿ *Implementing the standards*
- ✿ *Reporting the data*
- ✿ *Database available to programs around the world*
- ✿ *Funding of the programs that are helping in implementing the standards*

Conclusion

- ✿ *We need to be engaged from the beginning*
- ✿ *Want to be contributing to the standards as they are developed-to create maximum impact*
- ✿ *International groups are going to outnumber USA in all VCAs because of lower cost and higher demand*
- ✿ *Lack of reimbursement and high cost is the limitation*

Conclusion



Standardize-

For reimbursement to be a reality in
USA

For us its important to check our
outcomes



Mobit Sharma



S Iyer



P Kishore Srilekha Reddy



Jimmy Mathe



Shikha Gupta



Asundhra Jain



Jayanthanan R



Mohit Sharma



Anil Murarka



Shikha Gupta



Devajyoti Guin



Srilekha Reddy



Vasundhra Jain



Arun Sharma



Dr Abhijeet Wakure



Dr Chetan Mali



Dr Raghuveer Reddy



Dr Visakh Varma



Dr Ashish Chaudhari



Dr Akshay Omkumar



Dr Swapnil Dhake



Dr Shikha Gupta



Dr Dimpy Sharma



Dr Radhika K



Dr Nirav Maharaja



Dr Thomas Joe



Dr Ankita Harijee



Dr Srilekha Reddy G



Dr Shravan Rai



Dr Shruti Kongara



Dr B Abhinandan



Dr Vasundhra Jain