

Innovation at an affordable price – what Poland has to offer to the UK patient?

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Introduction

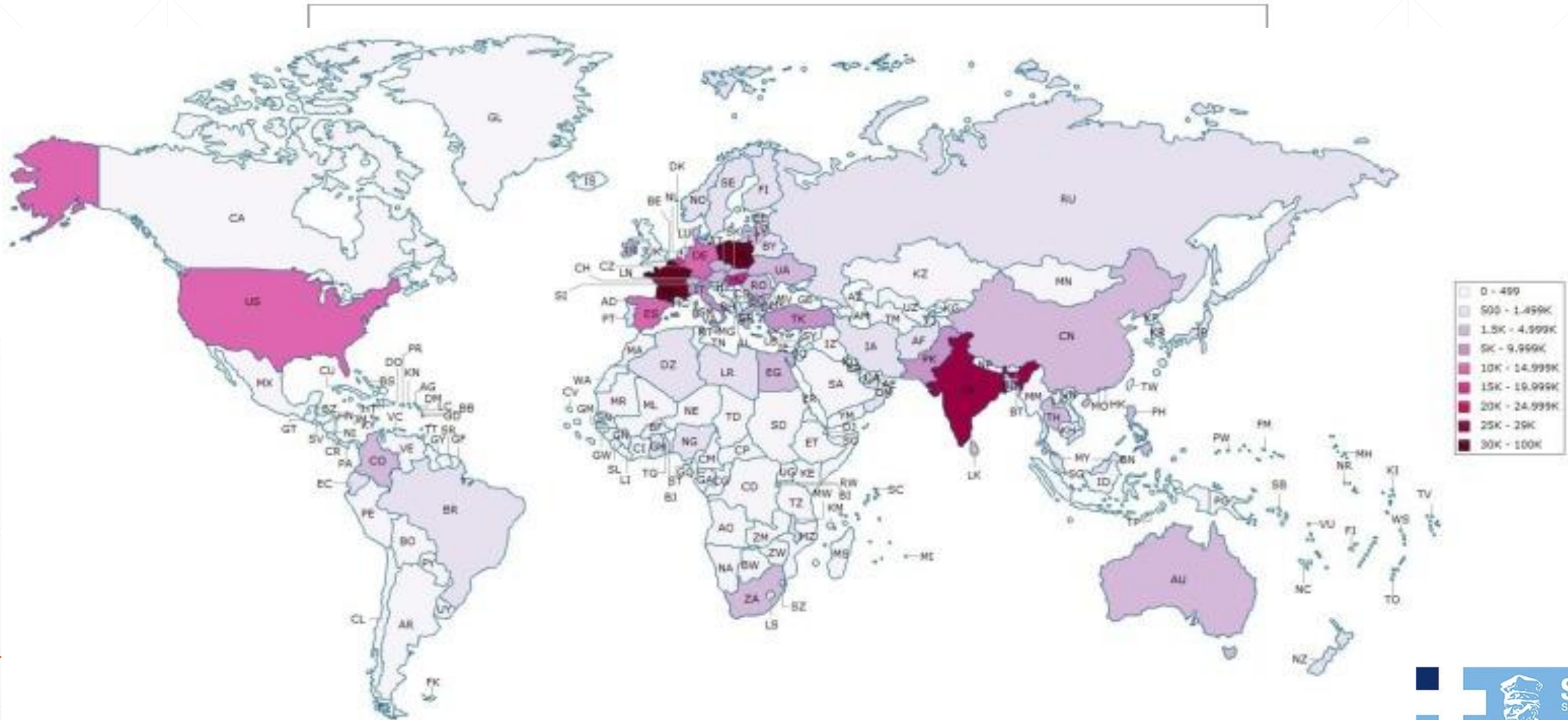
- Growing world-wide medical tourism market.
- Rapid development of Polish medical innovation¹.
- UK a net exporter of medical travelers - an estimated 63,000 UK patients sought treatment abroad in 2010².
- Poland is the largest clinical trials market in CEE (~20%) - 469 new clinical trials registrations in 2009 (396 in 2014) (3% of the world market by registration volumes)³.

¹<http://scienceinpoland.pap.pl/en/news/news,392647,report-rapid-development-of-polish-medical-innovation.html>

²Hanefeld J. *PLoS One*. 2013;8(10):e70406.

³PWC. Clinical Trials in Poland - Key Challenges. 2010 / 2015

Where do UK patients travel?





Most common procedures performed in Poland for UK patients

- **Dentistry** – implants (~1/4 of the UK price), endodontic treatment (~1/4 of the UK price), orthodontic treatment.
- **Plastic surgery** – breast augmentation and reduction (~1/2 of the UK price), liposuction, rhinoplasty, eyelid correction.
- **Orthopedic surgery** – THA, TKA, arthroscopy.
- **Bariatric surgery** - intragastric balloon, lap-band



What can distinguish Polish medical services from other popular medical tourism locations?

- Price competition at the forefront of what the patient assesses.
- Surroundings
- Safety
- High standard of care



Innovation and patient-centered innovation!





Innovation through the implementation of novel research results and quality-driving new treatment protocols

- Poland well known for its consistent, high-standard of care and affordable prices.
- Modern Poland as an increasingly respected place for high-quality research.
- Increasing push on the implementation of novel research results into clinical practice.
- Large, well-equipped and well-staffed research base (in Krakow and other major academic cities in Poland which are also the target destination of the majority of medical tourists – ie. Wroclaw, Poznan, Gdansk, Warszawa).
- **Compete through innovation and be the driver (not the passenger) of positive healthcare change!**

**Examples of innovatory
research that drive
medical/dental care**

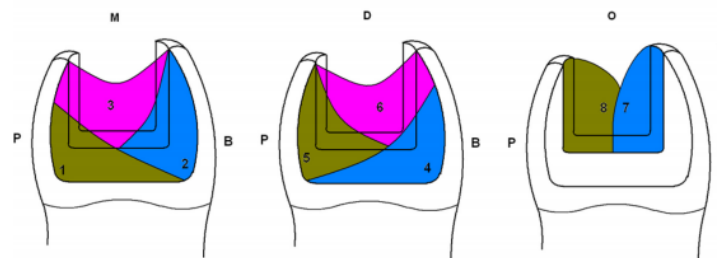


Biomimetic tooth restoration protocols

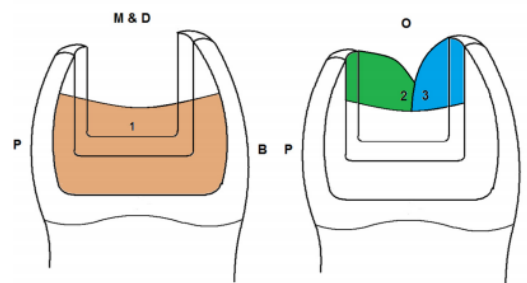
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JOURNAL OF DENTISTRY 43 (2015) 309-316

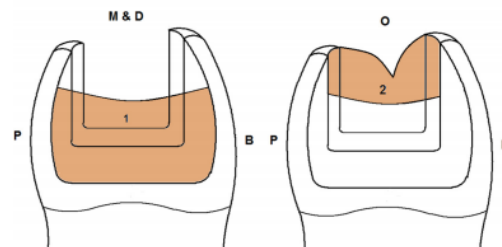
(a) Restoration protocol 1



(b) Restoration protocol 2

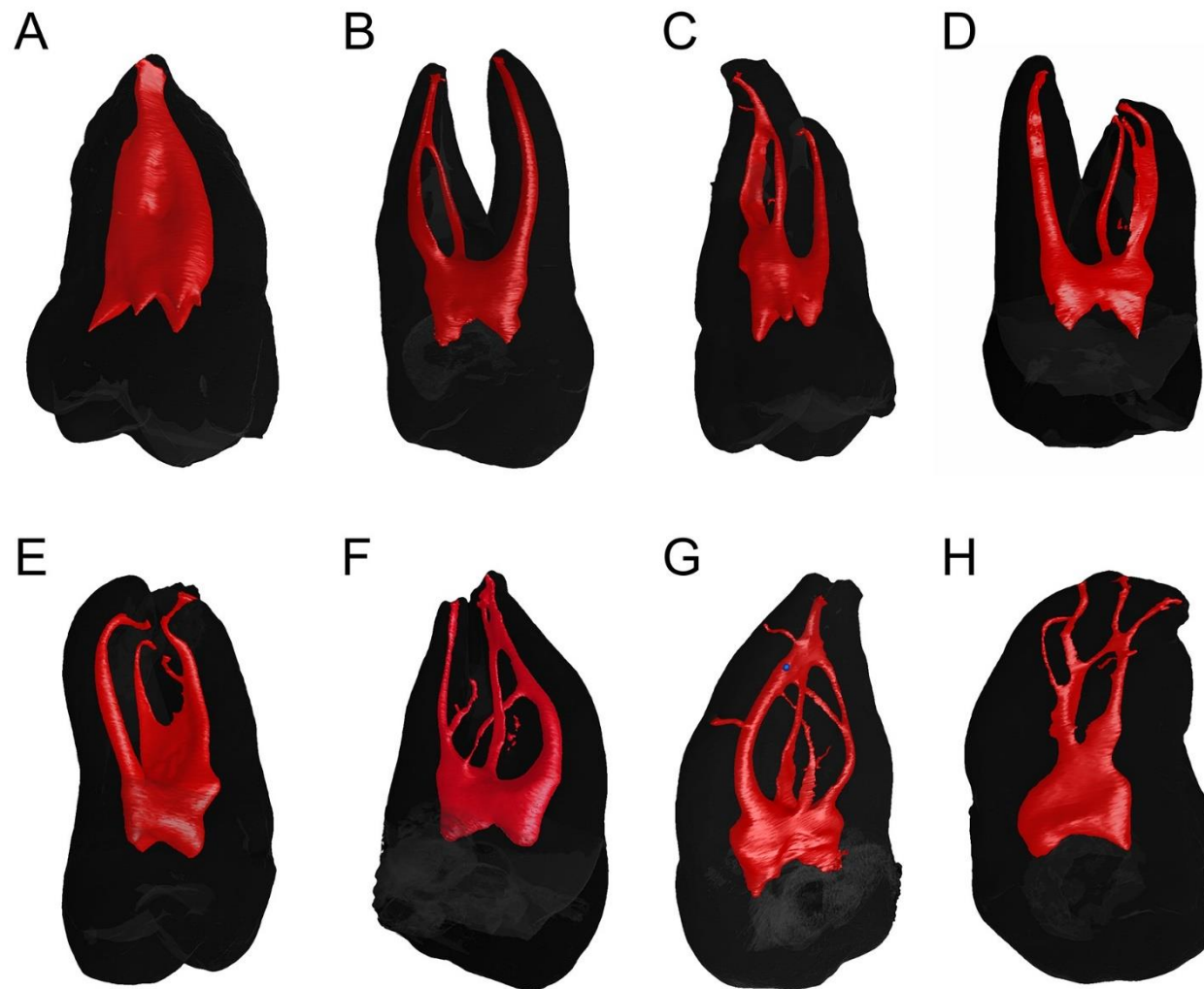


(c) Restoration protocol 3



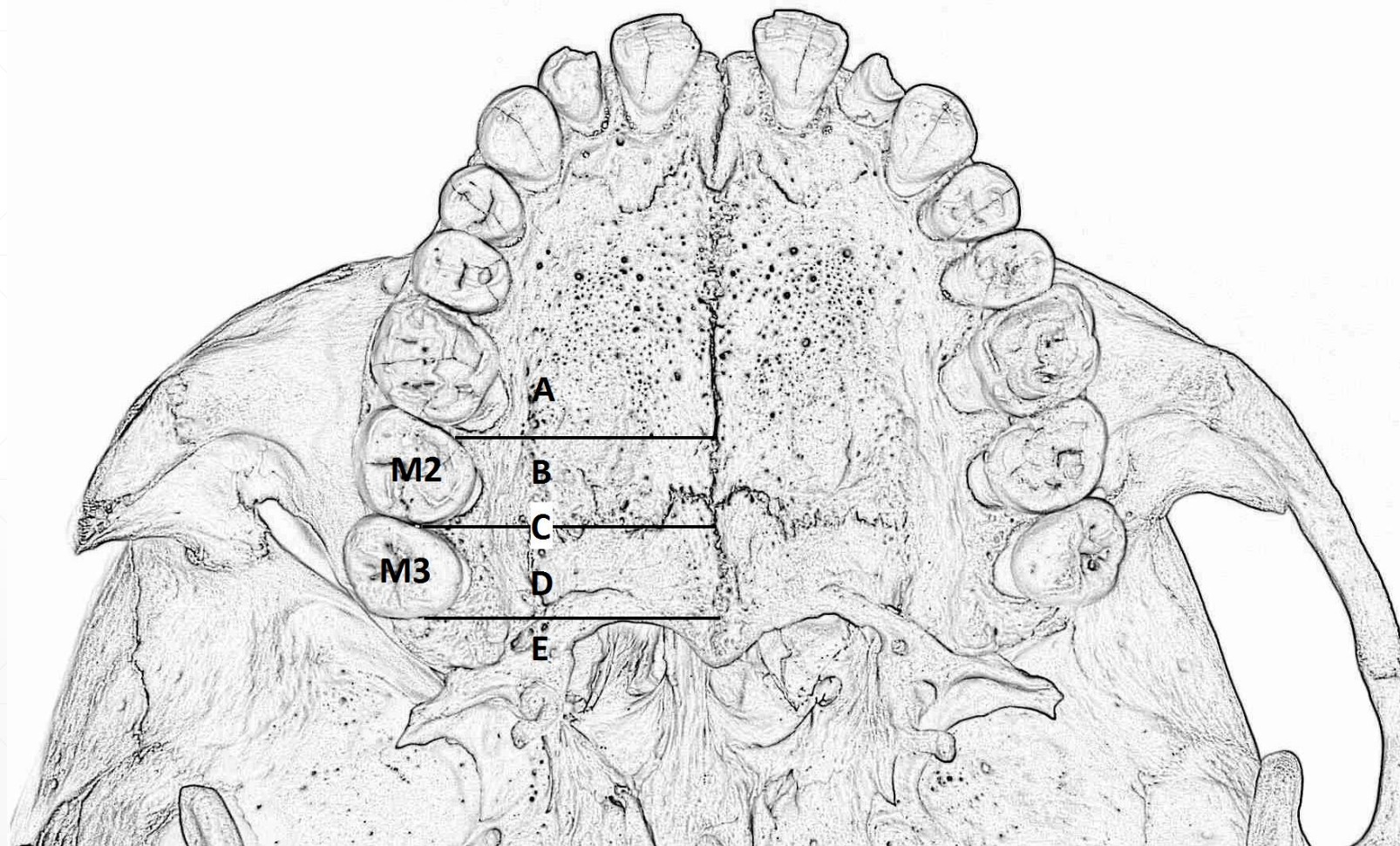


Novel endodontic treatment methods



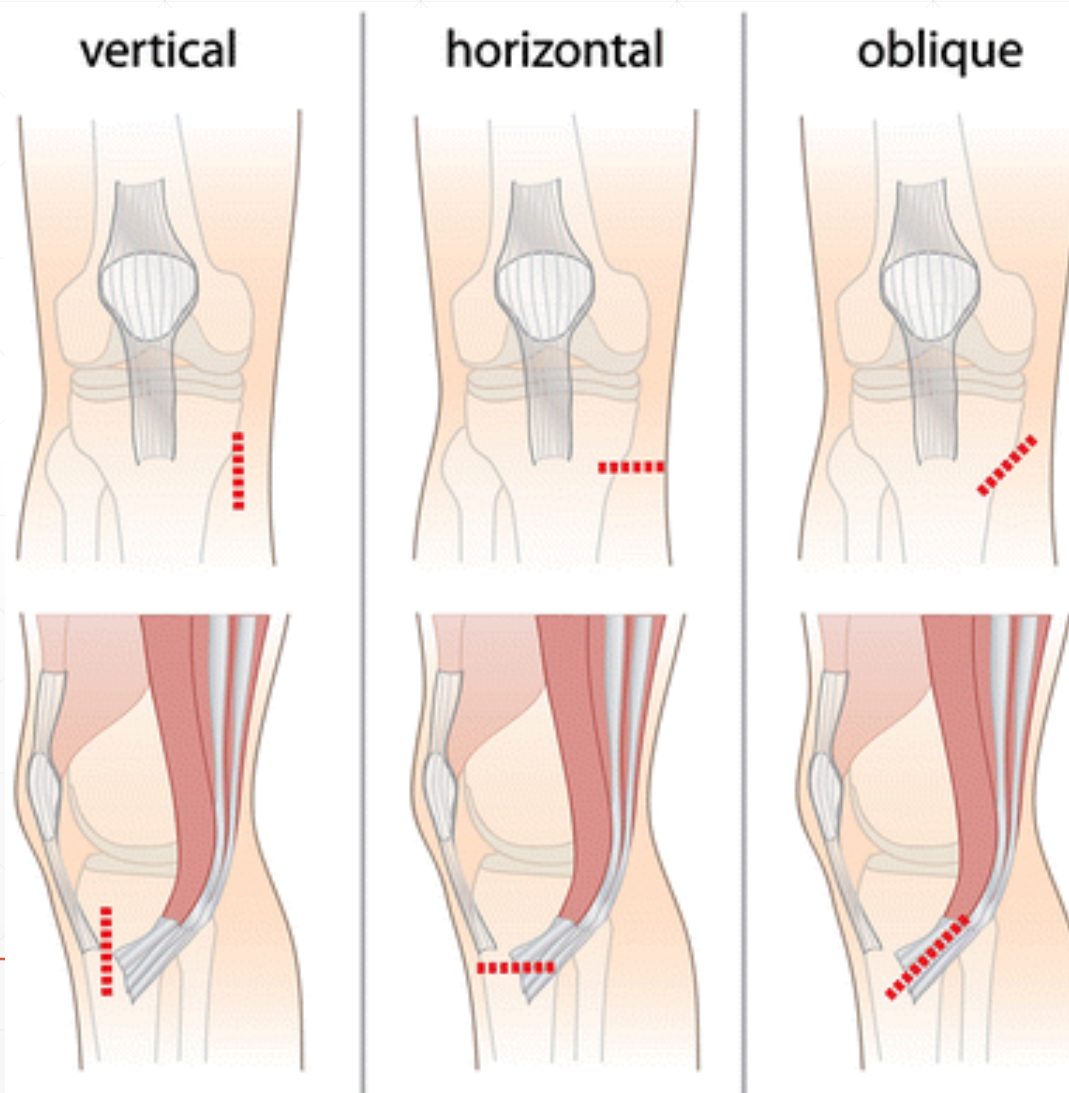


Safer and more accurate dental anesthesia methods

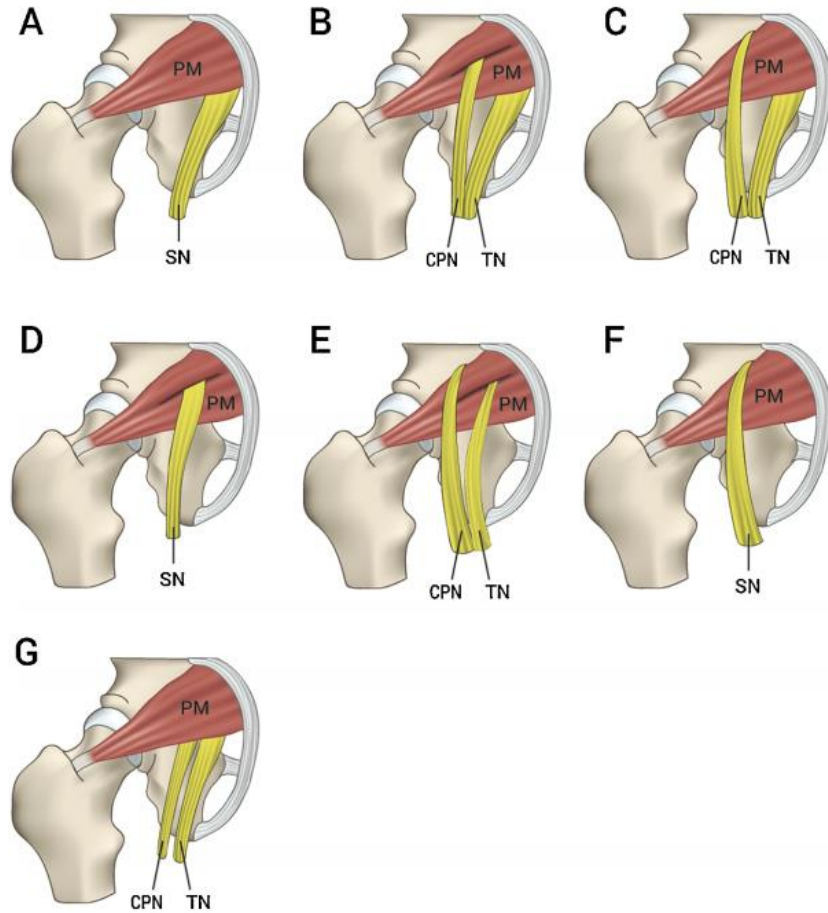




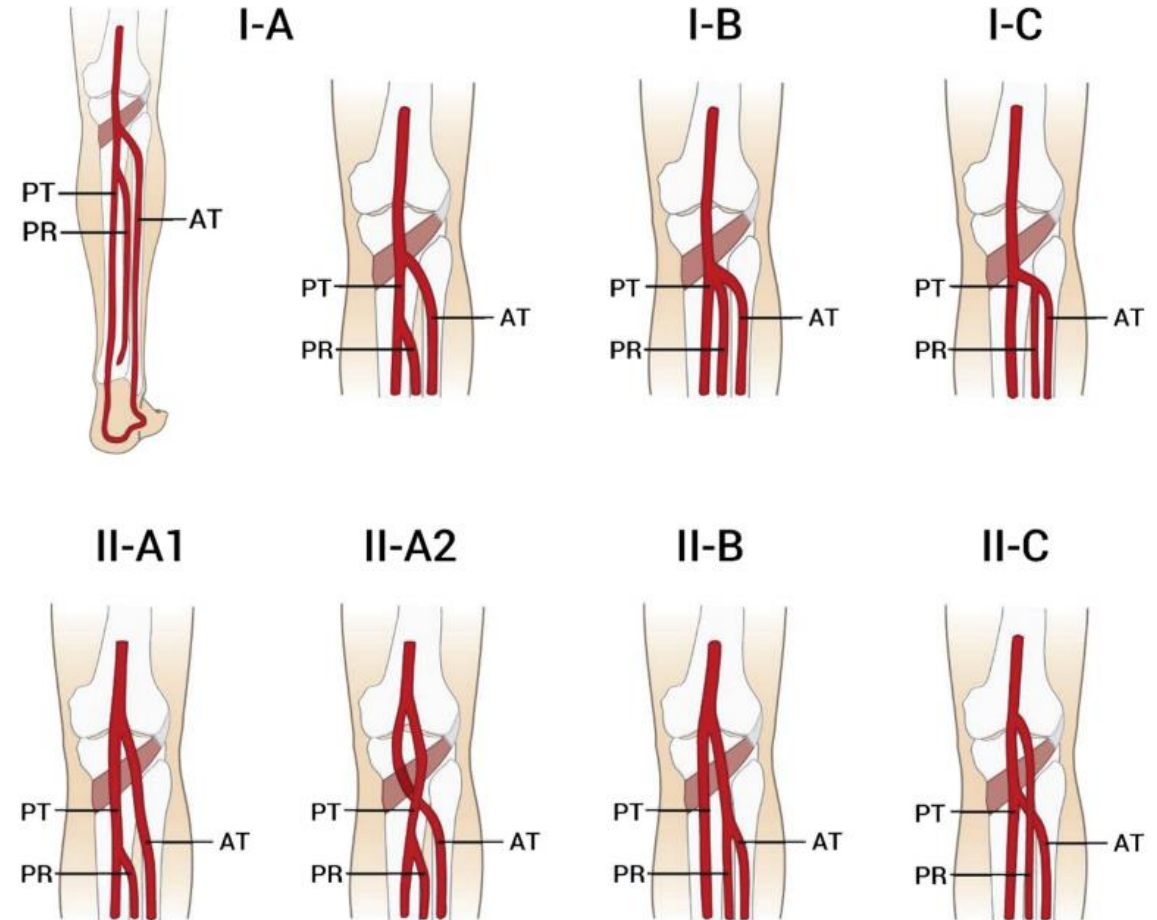
Safer, complication free arthroscopy portal placement



Safer THA's and TKA's



Tomaszewski KA et al.
J Orthop Res. 2016 Oct;34(10):1820-1827.



Tomaszewski KA et al.
J Vasc Surg. 2017 Feb;65(2):521-529.e6.

Wanting to start innovating for medical tourism?

500

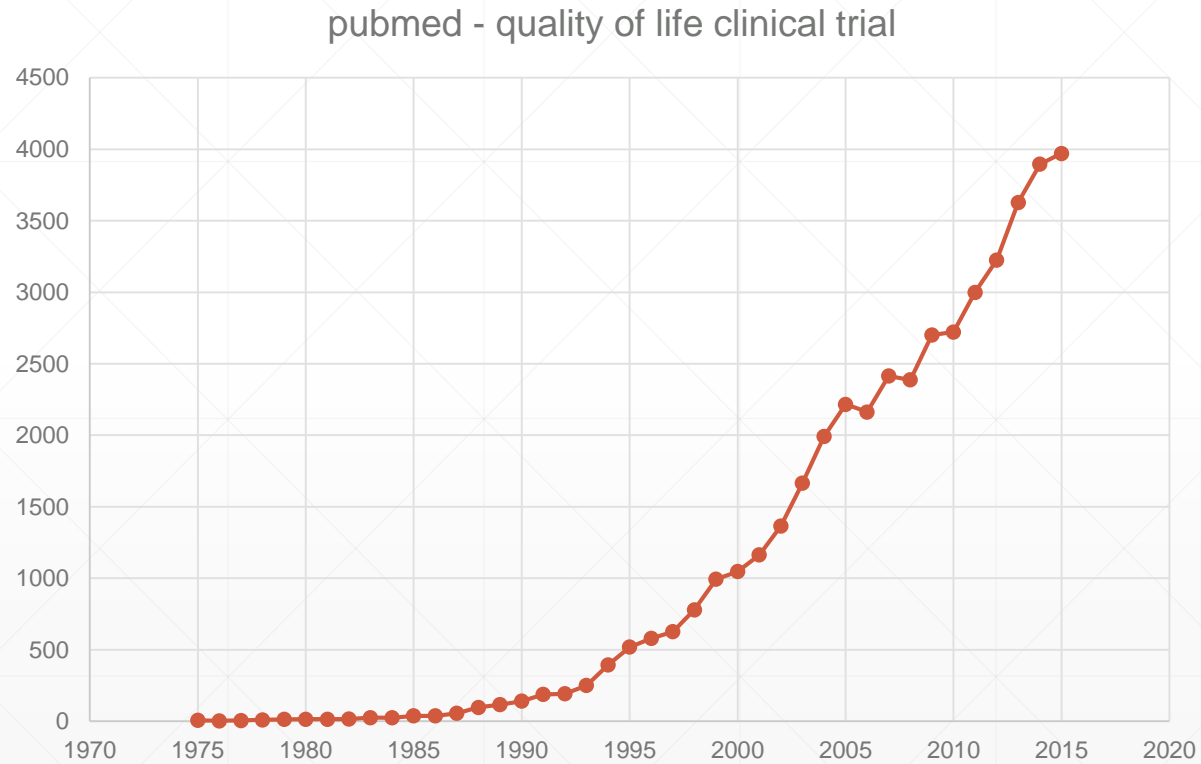
TOP 500 INNOVATORS
SCIENCE MANAGEMENT
COMMERCIALIZATION



Stowarzyszenie Top 500
Innovators

**Clinical trials as a
direct/indirect opportunity
for medical tourism**

Increasing interest in clinical trials



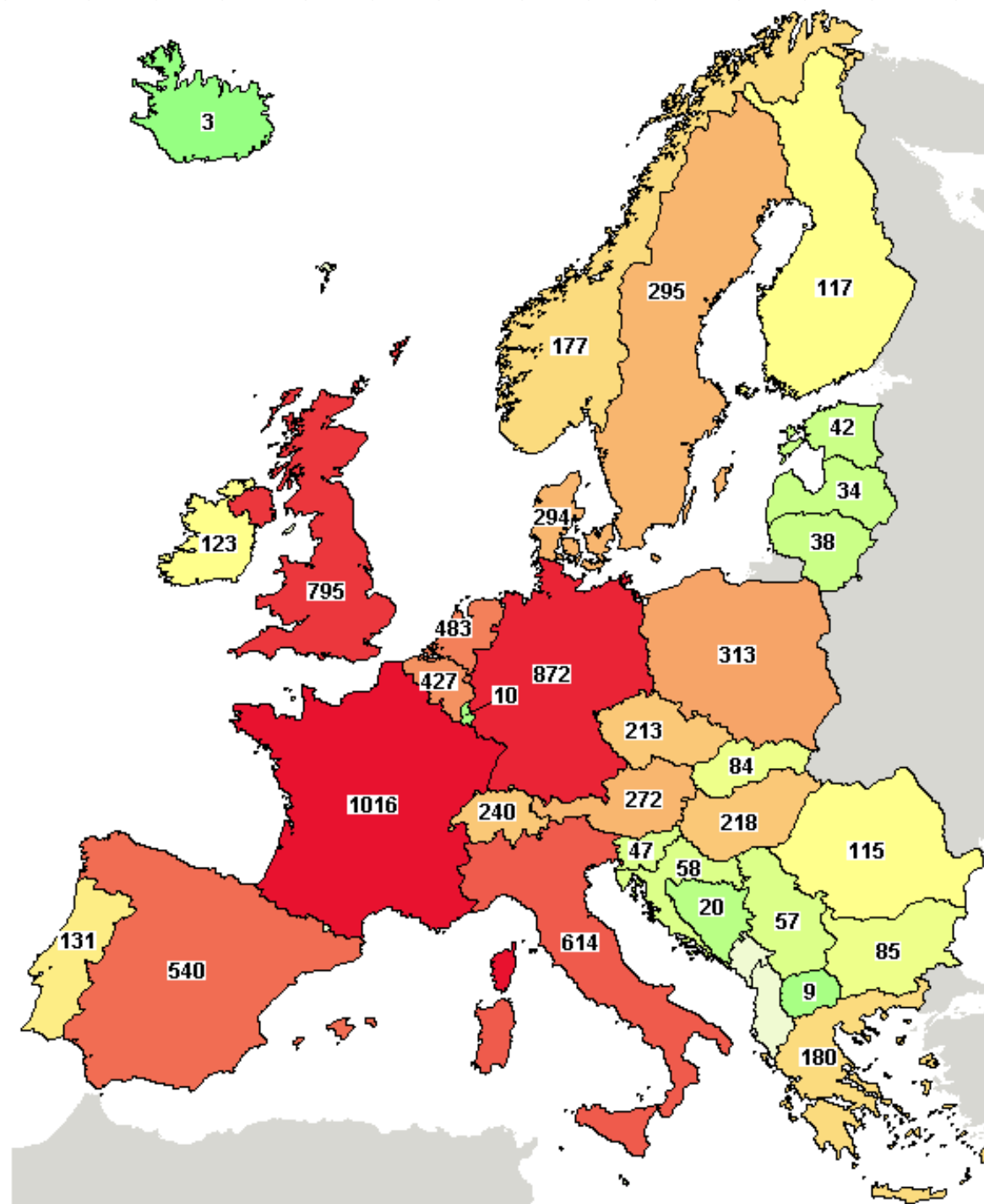


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ClinicalTrials.gov

Search term:
"quality of life"

Total 9854
CEE ~2800



ClinicalTrials.gov

Search term:
"cancer quality of life"

Total 8153
CEE ~1100

Colors indicate the number of studies with locations in that region

Least Most

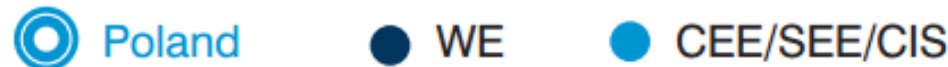
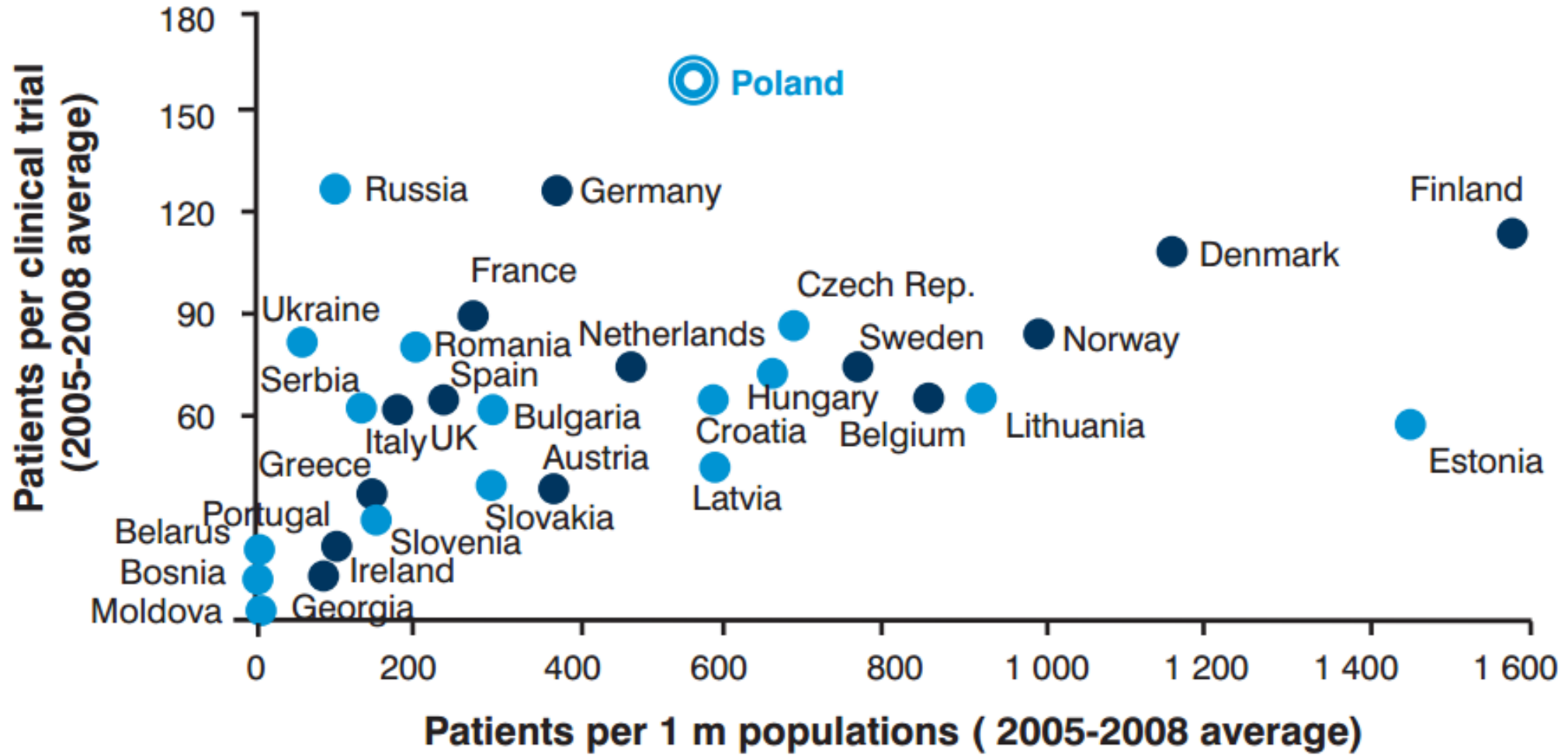
Labels give the exact number of studies



Opportunities in introducing CT in EE

- EE is also a great target “market” to introduce CT’s with key drivers being:
 - high quality of medical staff
 - well-organized and specialist research sites
 - strong sponsor/CRO market, qualified and experienced CRAs
 - attractive level of clinical trial costs vis-a-vis WE
 - high adherence to protocol

Average clinical trial size vs. participation rates (pivotal clinical trials submitted in MAAs to the EMA)



Challenges in introducing CT's in EE

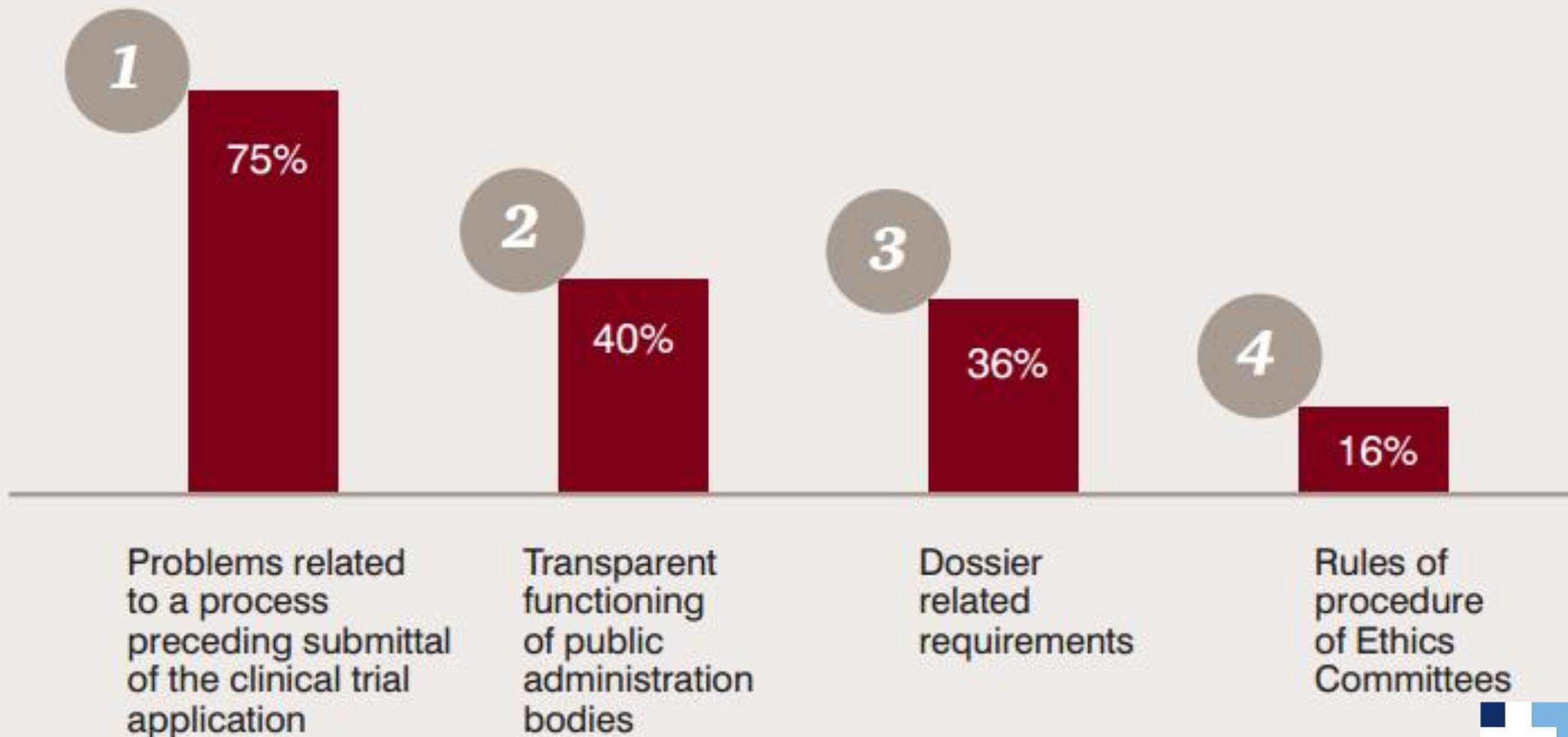
- Marginally longer CT registration time (no impact on ethical approval).
- Increased burden of on-site management/administration.
- Insufficient information sharing.
- Insufficient transparency of rules and regulations.
- Issues with understanding competency split (different regulatory/approval bodies – especially in non-EU countries).
- Difficulties in cooperation between sponsors, sites, and researchers (lack of “pre-prepared” administrative solutions/processes e.g., contracting).
- Most of the above challenges are / will slowly become obsolete with the introduction of the EU Regulation No 536/2014 (in EE EU Member States).

PwC Survey: "What are key problems related to the clinical trial authorization process?"

(% of respondents rating the matter as "poor" or "very poor")

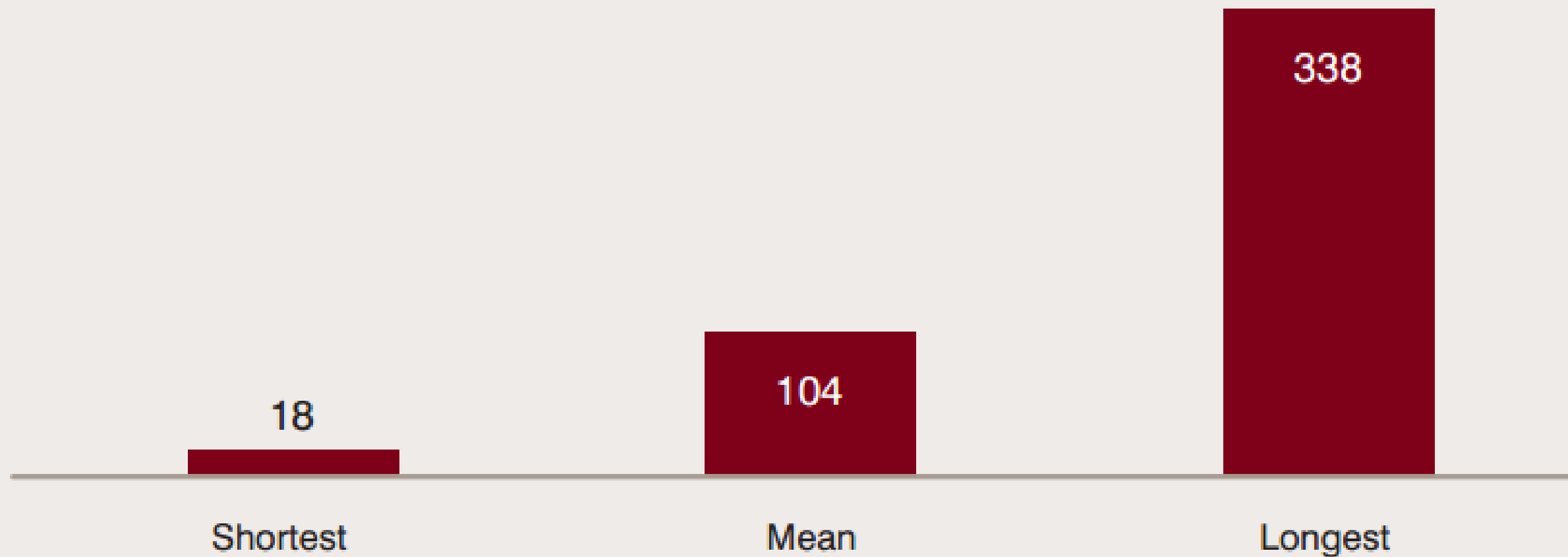


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PwC Survey: “Mean time of negotiating contracts with sites” [days]



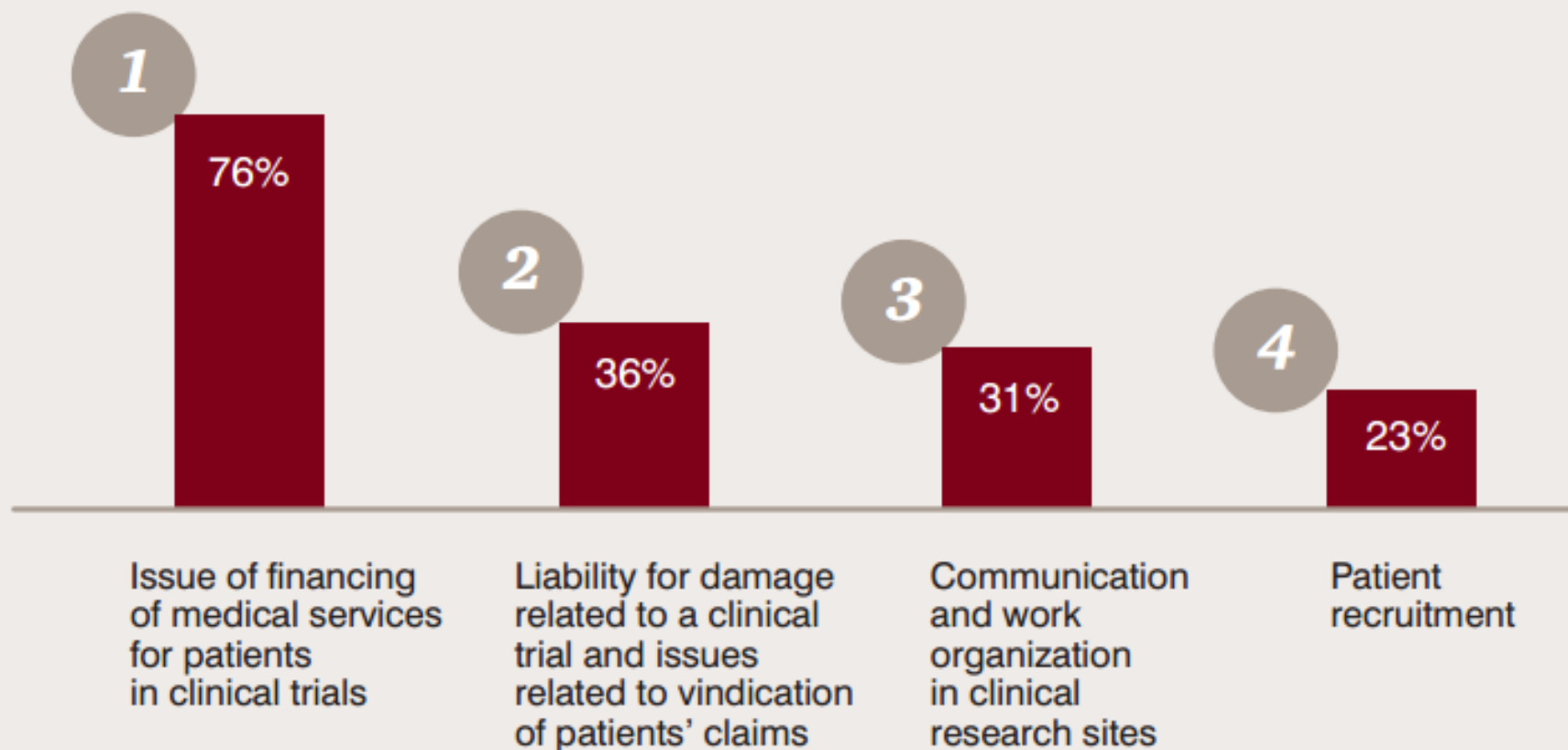


PwC Survey: Mean time of clinical trial registration in CEE countries, 2014 [days]





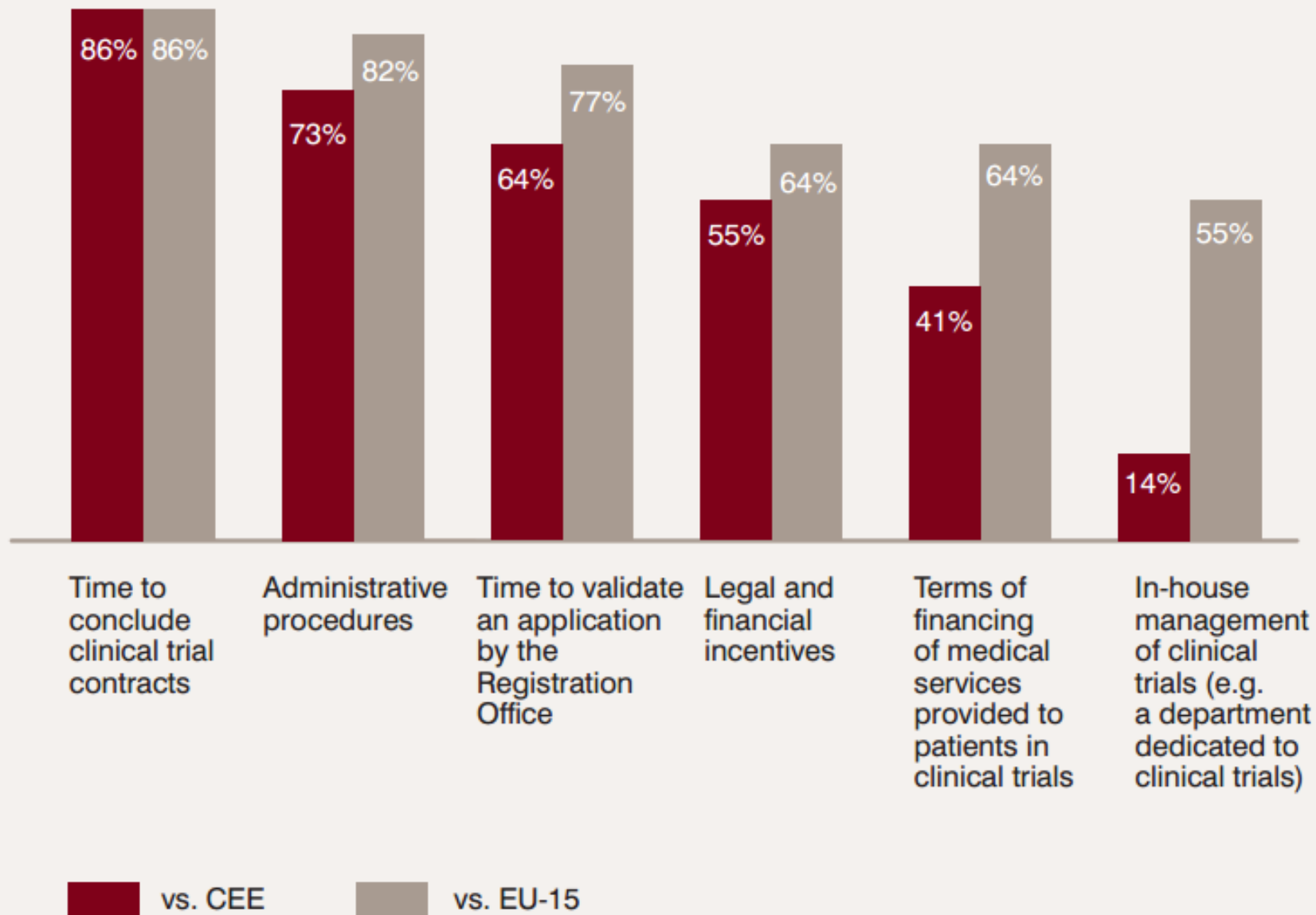
**PwC Survey: "What are the key problems related to the clinical trial conduct?"
(% of respondents rating the matter as "poor" or "very poor")**



PwC Survey: "What are the key disadvantages of Poland vs. CEE and EU-15?"



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How to introduce more clinical trials in Eastern European countries?

- Introduction of a more plausible regulatory framework (timing/feasibility of administration procedures).
- Improvement of transparency, especially in terms of clear competency split between different regulatory and approval bodies.
- Tailoring the administrative processes to improve day to day cooperation between sponsors and sites.
- Development of dedicated units responsible for clinical trials (including QoL monitoring).
- Good communication practices.
- Overall, operational and regulatory rationalization (improve processes and create dedicated units).

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