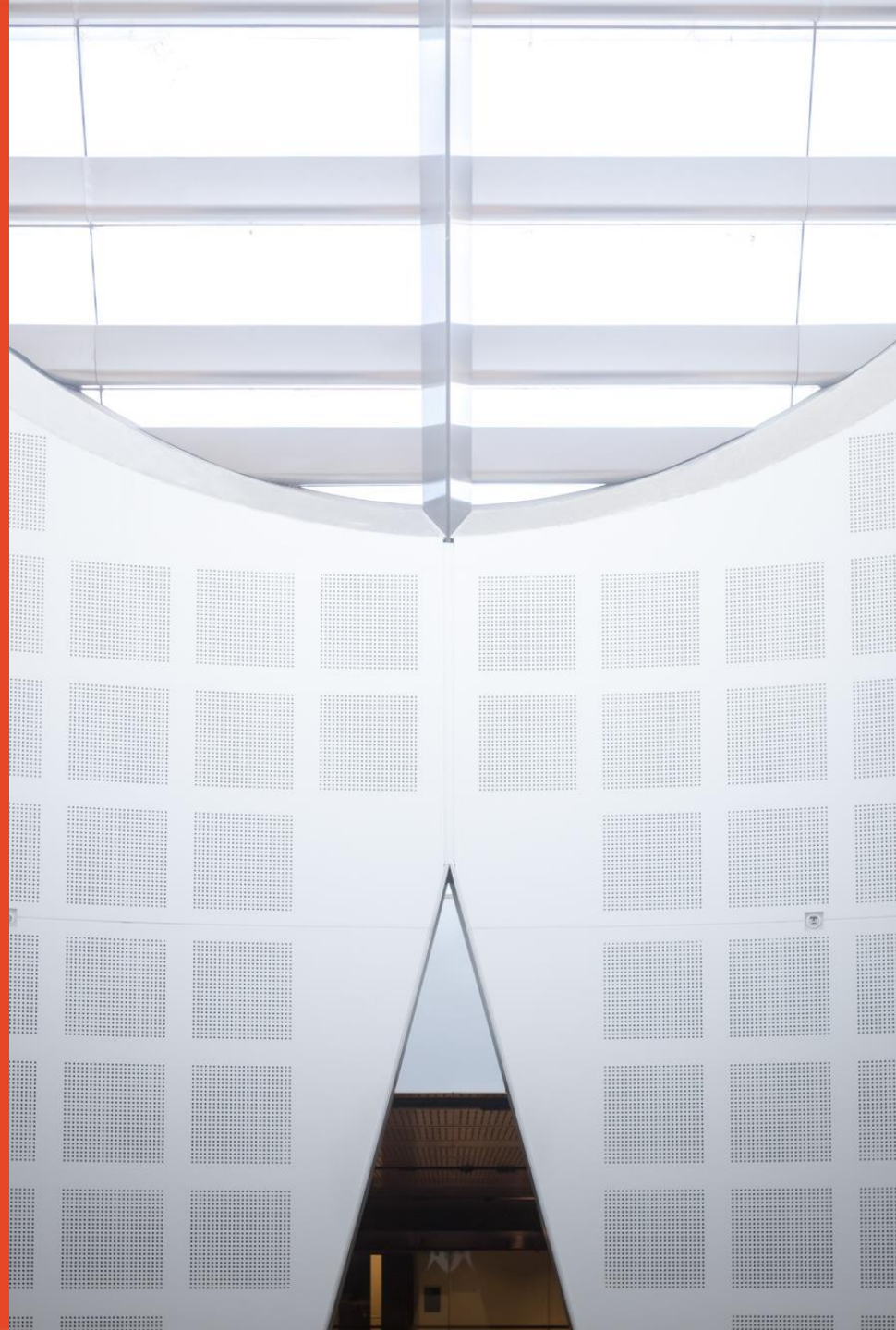


# Conflict of interest in clinical innovation: implications for governance

**Associate Professor Wendy Lipworth,  
MBBS, PhD  
Sydney Health Ethics**



THE UNIVERSITY OF  
**SYDNEY**



# Overview

- Clinical innovation and its governance
- Conflict of interest in clinical innovation
  - The case of adult autologous stem cell interventions
- Striking the right balance in the governance of clinical innovation

# Clinical innovation

- Use of interventions that differ from standard practice, and that have not (yet) been shown to be safe or effective according to the usual standards of evidence-based medicine
- Minor or major
  - New suturing technique vs. new implantable device
  - Old drug in new age group vs. experimental drug

# Clinical innovation

- Common
  - Surgical procedures
  - Off-label prescribing (esp. e.g. paediatrics, obstetrics)
- Allowed by regulators
- Changing regulatory standards
  - managed entry
  - “right to try”
  - epidemics

# Arguments for innovation

- Can't test everything in everyone
- Research not always
  - Possible
    - Complex/invasive interventions
    - Small populations
  - Affordable
  - Ethical...

# Arguments for innovation

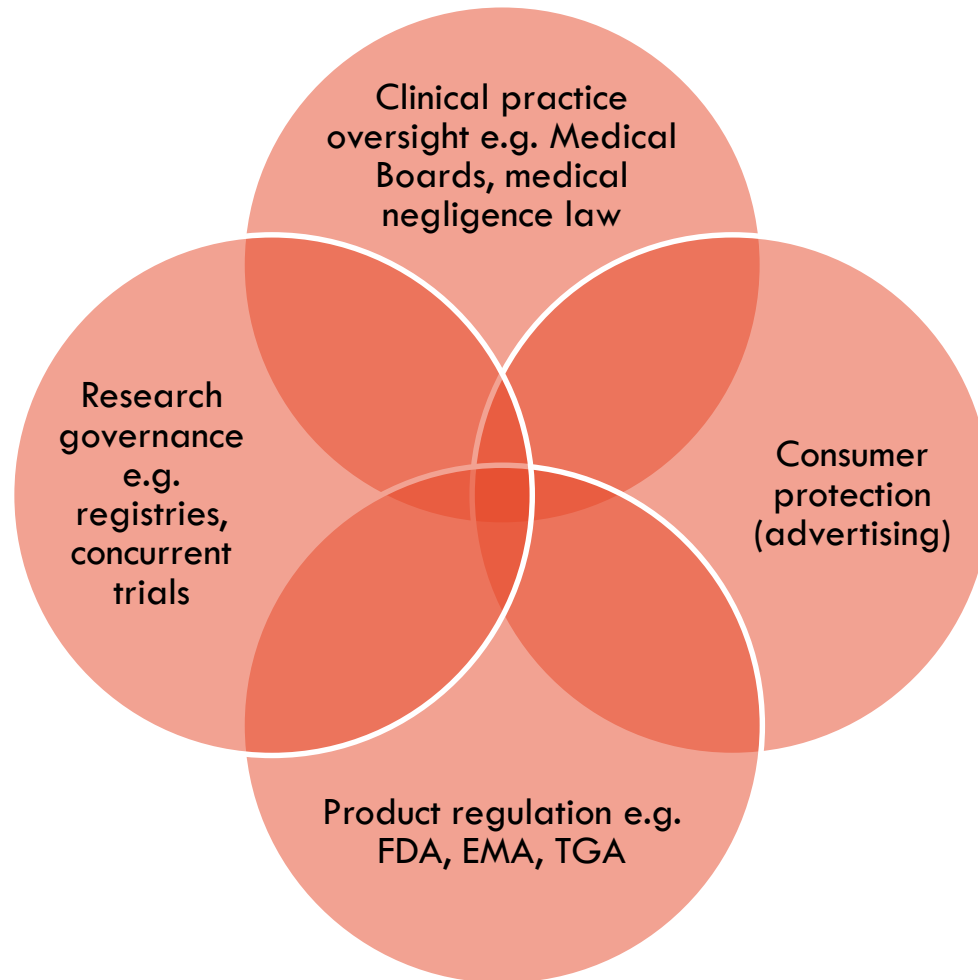
- Patients can't wait for research
  - And should not have to
    - Current patients are not means to an end
    - “Right” to access experimental treatments
- Regulatory processes are limited
  - Commercial imperatives
- Ideas are generated in the clinic

## Concerns about innovation

- Not always effective or safe (TVM, anti-arrhythmics)
- Expensive
- Threat to knowledge generation

→ Some kind of oversight is needed

# Governance of innovation





# Concerns about governance

## – Holding doctors back

### – Saatchi bill

- Introduced into the House of Lords by advertising mogul Lord Saatchi in 2012.
- Law of negligence deters responsible clinical innovation

# Concerns about governance

- “Patients” are informed consumers who:
  - Can make own decisions re risk
  - Should be respected in doing so
  - Are pushing back against traditional biomedical hegemony

[Salter, Zhou, and Datta 2016 “Hegemony in the Marketplace of Biomedical Innovation: Consumer Demand and Stem Cell Science.” Soc Sci Med 131: 156–63.]

## Patients are consumers

“At the center of the model [of medical innovation] is the informed health consumer who assumes she/he has the right to make their own choices to buy treatment in a health care market which is another form of mass consumption”

## Consumers have a different rationality

“the characteristics of a particular disease condition, the proximity of pain and/or death, and the limits of local treatment . . . generates a calculation of risks and benefits with its own internalist rationality and values. Such a subjective rationality may be at odds with the rationality of the external observer, be they scientist, bioethicist or policy maker...”

# Consumers are pushing back against a hegemony

Patients are “activating medical innovation through the registering of their demand in the market of medical practice”

# Responding to the critics

- Governance is not holding doctors back
  - No “hegemony”
  - No easier to prove misconduct, trespass, negligence
- Patients are not “consumers” in a marketplace
  - Information asymmetries
  - Desperation → “coercion”
- Even “free markets” are regulated

## Another argument against governance

- Clinical innovation is between a doctor and a patient
- Innovating doctors are professionals who:
  - Have patient's best interests at heart
  - Can make good decisions
    - For patients
    - With patients
- So there is no need for external governance
  
- But is this really the case? Do innovating doctors really have (only) their patients' best interests at heart?

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# Adult autologous stem cell interventions: overview

- **Stem cell:**
  - Self renewing cells that can develop into other cell types
- **Adult:**
  - Non-embryonic
  - Umbilical cord, bone marrow, fat
- **Autologous:**
  - Taken from and returned to same person

# Uses of adult autologous stem cells

- Blood stem cell transplants
  - Extract blood stem cells
  - Treat condition (e.g. leukaemia) with high dose chemotherapy
    - Also destroy bone marrow
  - “Rescue” with blood stem cells (//cells as “therapy”)
- Other stem cell interventions
  - Extract connective tissue/fat stem cells
  - Re-administer these *as the therapy*

# Effectiveness

- Blood stem cell transplants
  - Standard treatment for leukaemia
  - Promising for MS, scleroderma
- Other stem cell interventions
  - Some promising basic science/animal models
  - Minimal clinical evidence for arthritis, cardiac disease
  - No clinical evidence for anything else

# Concerns

- Despite lack of evidence...
  - Widely used as “innovative” practice
    - Arthritis
    - Other: MS, MND, dementia, autism, macular degeneration etc.
- Growing criticism
  - Risks and costs
  - Irresponsible conduct
    - Aggressive, misleading marketing
    - Financial exploitation
    - Poor quality evidence generation

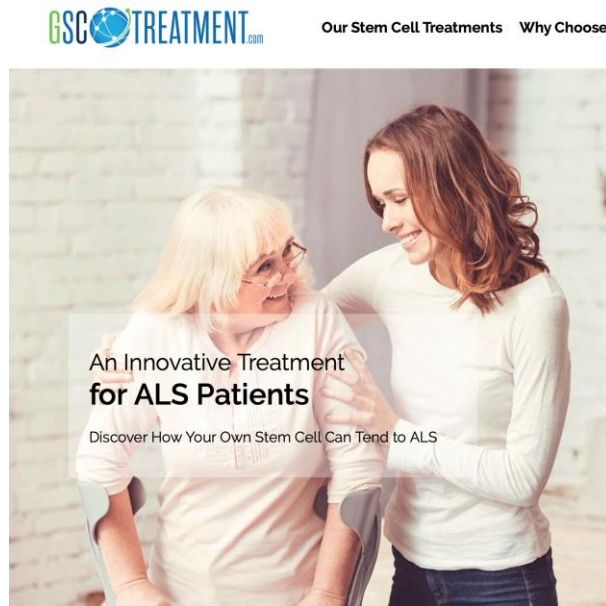
# Aggressive and misleading DTCA

## – Aggressive and misleading DTCA

- Media appearances

- Websites

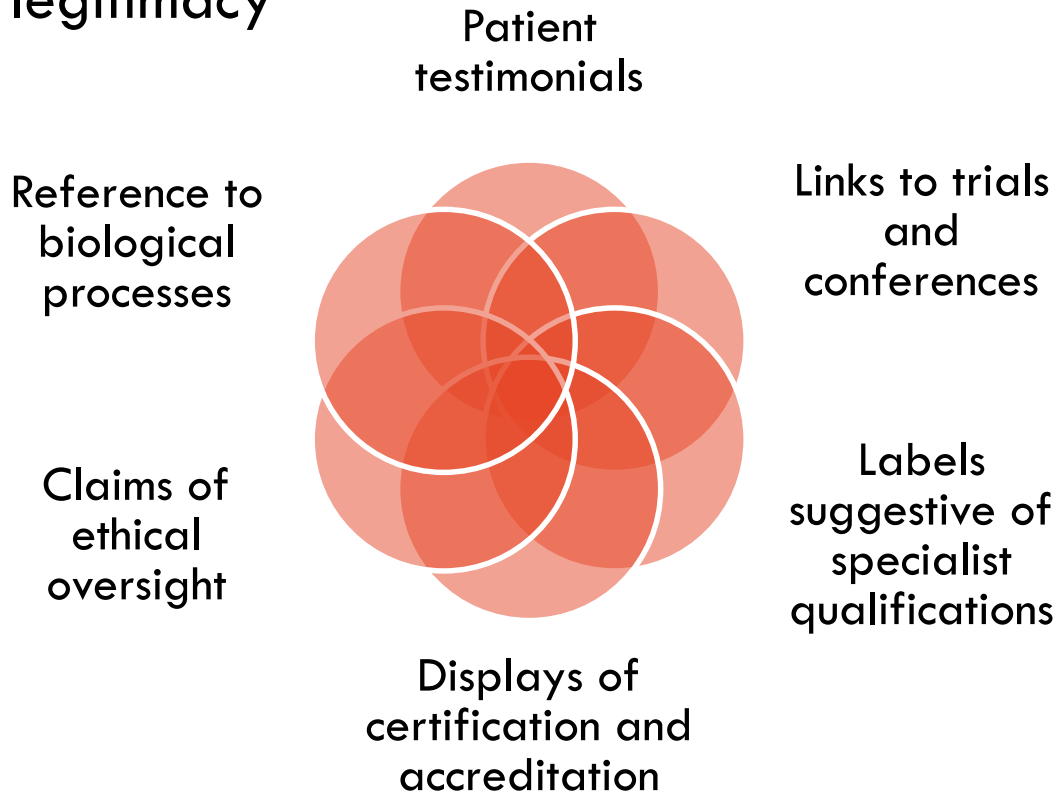
- Sometimes blatant



- Otherwise indirect “tokens of legitimacy”...

# Aggressive and misleading DTCA

## – Tokens of legitimacy



# Tokens of legitimacy

Read Dr. Riordan's Book

Want to learn more about how stem cell therapy is disrupting medicine and transforming lives?



Purchase a copy of Dr. Riordan's new book about stem cell therapy today!

[PURCHASE](#)

## Macquarie Stem Cells are Leading Biological Treatments

Dr. Bright along with our complete team of medical and scientific professions regularly attend conferences all around the world to make sure we are up to date with the advances in biological treatments. *We don't just attend. We are often called in to present Macquarie Stem Cells' research all around the globe!*

Here at Macquarie Stem Cells we have understood Joint Replacement Surgery can be avoided or delayed with the right treatment and we are working harder than anyone else to change the "general approach" for treating osteoarthritis.

Just to give you an idea, we have even ran workshops to train doctors from all around the world so this treatment is well known and understood.

Below is a basic map showing all of the areas we have been to keep up our knowledge & to educate the world



Conferences List can be found below



The staff was excellent and quickly answered any questions I had. The fact that Kristin Comella is the scientist in charge and is one of the most influential people involved in stem cell therapy globally made me feel extremely fortunate and that I couldn't be in better hands

**Heather**

Traumatic Brain Injury Patient

# Financial exploitation

- Payments for “treatments”
- “Pay-to-participate” trials and registries
  - Exacerbate therapeutic misconception
  - Disincentive to complete



# Poor quality evidence generation

## – Trials

- Registered but not conducted
- Small, open label

## – Registries

- Voluntary
- Incomplete information about procedures
- Subjective outcome measures
- Non-transparent

# International Cellular Medicine Society “Open treatment registry”

Q: Is cell line information kept private?

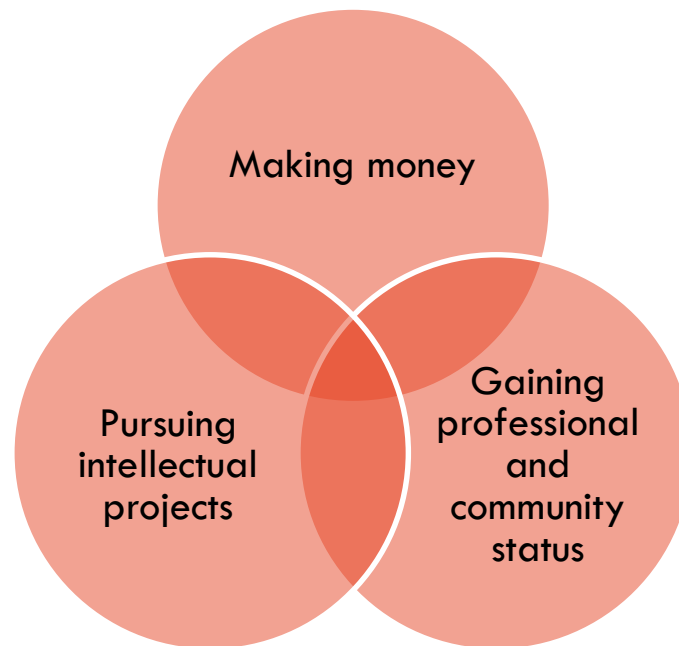
Y: Yes. The ICMS does not require disclosure of proprietary information on how a clinic collects, processes and implants its cell line. The applications for cell line identifier requires that the clinic provide general information on cell source, processing and implantation methods. All clinic data provided in the Treatment Registry agreement is kept confidential.

Q: Who sets access to the data?

A: Clinics control access to their own data within the Treatment Registry. Clinics may choose to share all, none or selected collections of data with the general public, members of the ICMS or researchers.

# Why is this the happening?

- Ignorance?
- Conflict of interest between:
  - Commitment to patients and knowledge generation
  - Other interests



## Why is this happening?

- Financial exploitation → more money
- Advertising → more patients → more money
- Research and registries → tokens of legitimacy → more money

# International Cellular Medicine Society



**Q:** Are clinics able to advertise their participation in the Treatment Registry?

**A:** Yes. Advertising that an independent nonprofit is providing patient outcome tracking is a powerful marketing tool for clinics. Clinics are not allowed to imply that they are accredited by the ICMS because of their participation in the Treatment Registry.

<https://www.facebook.com/InternationalCellularMedicineSociety/photos/rpp.182456871794152/257259850980520/?type=3&theater>

# Generalisability

- Other examples of unethical behaviour
  - ART “add ons”
  - Off-label prescribing of psychotropics
  - Devices e.g. hip replacements
- All innovating doctors
  - Have COIs
  - Are influenced
    - Industry pressure
    - Patient pressure

# Conclusion

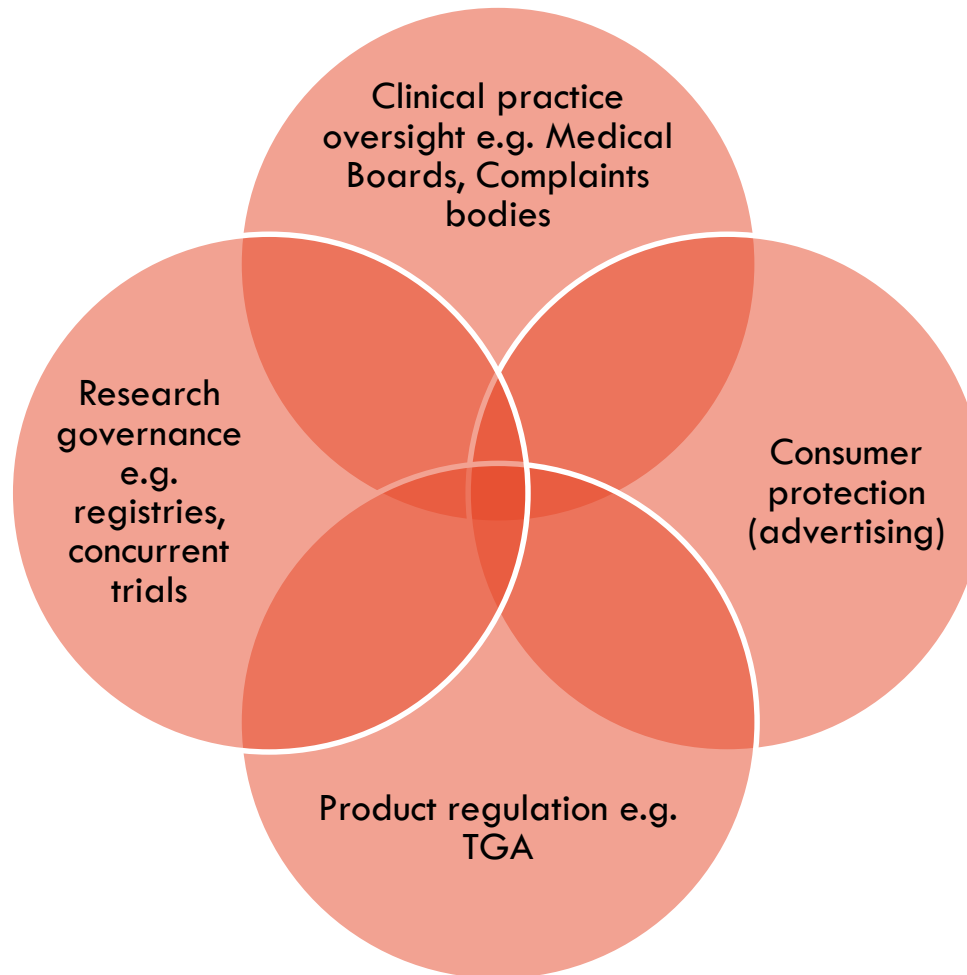
- Oversight of clinical innovation is essential
- But need to balance
  - Facilitating responsible innovation
  - Protecting patients from exploitation

# Overview

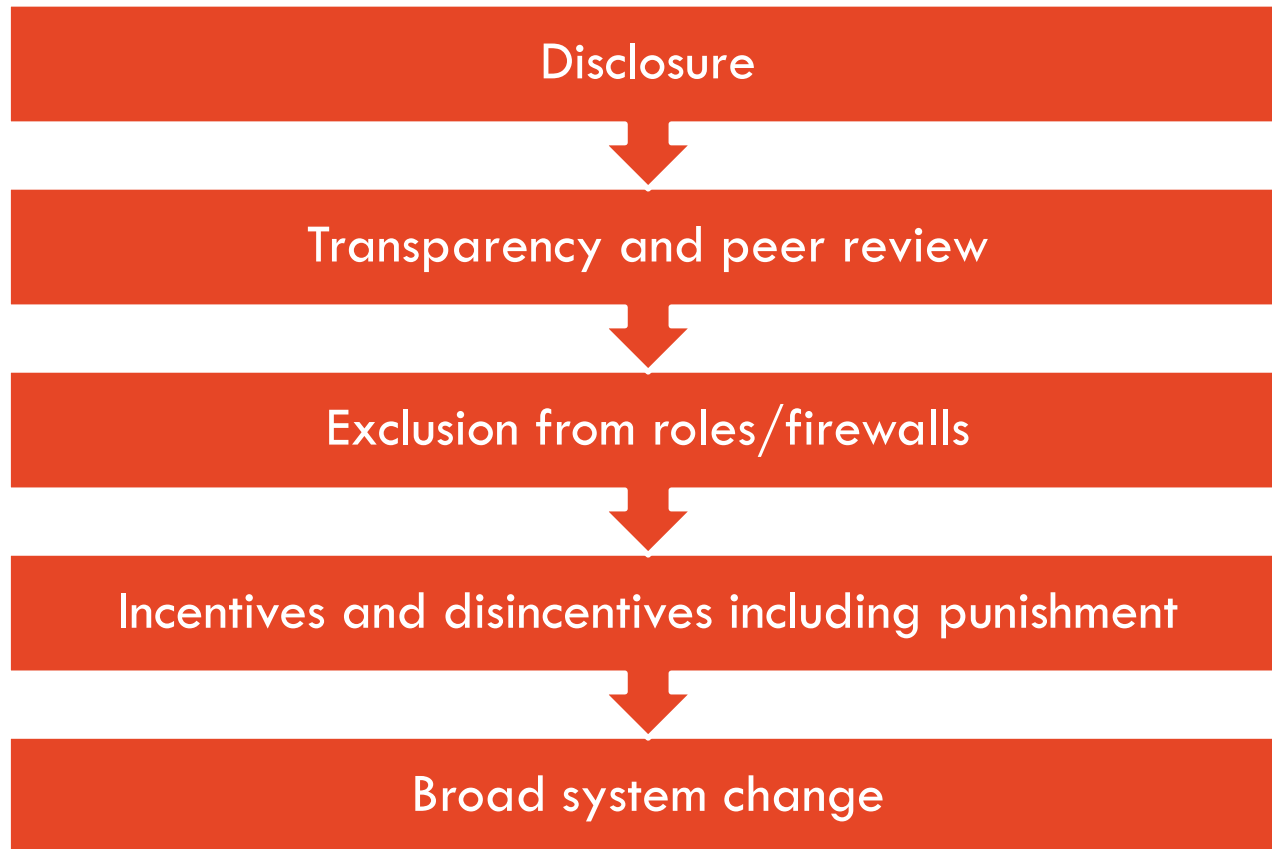
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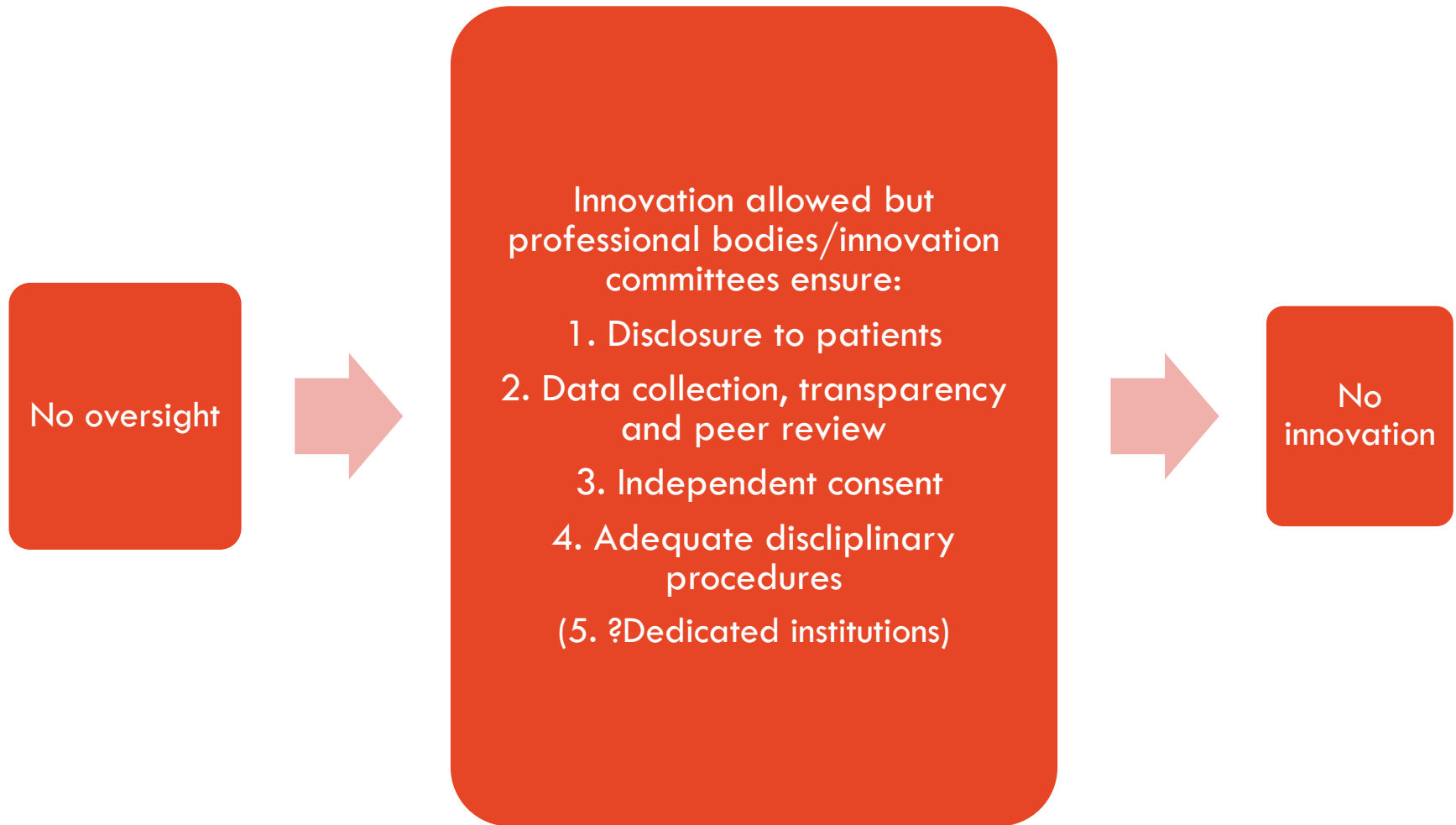
# Governance in the face of COI



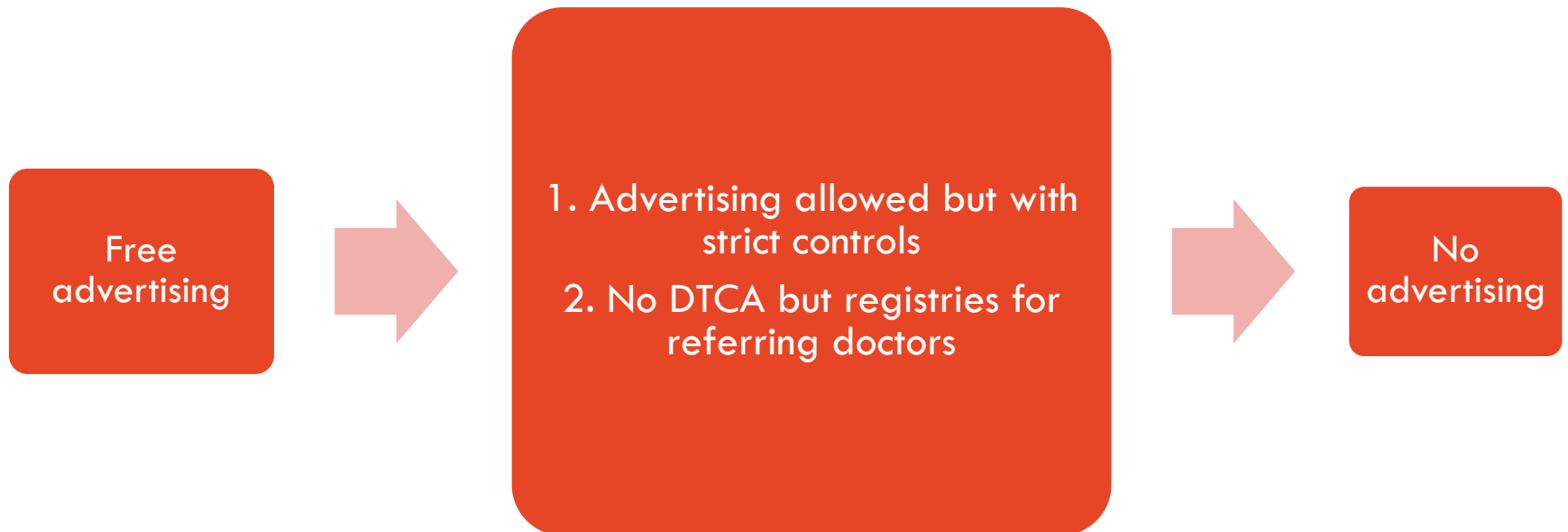
# Management of conflict of interest



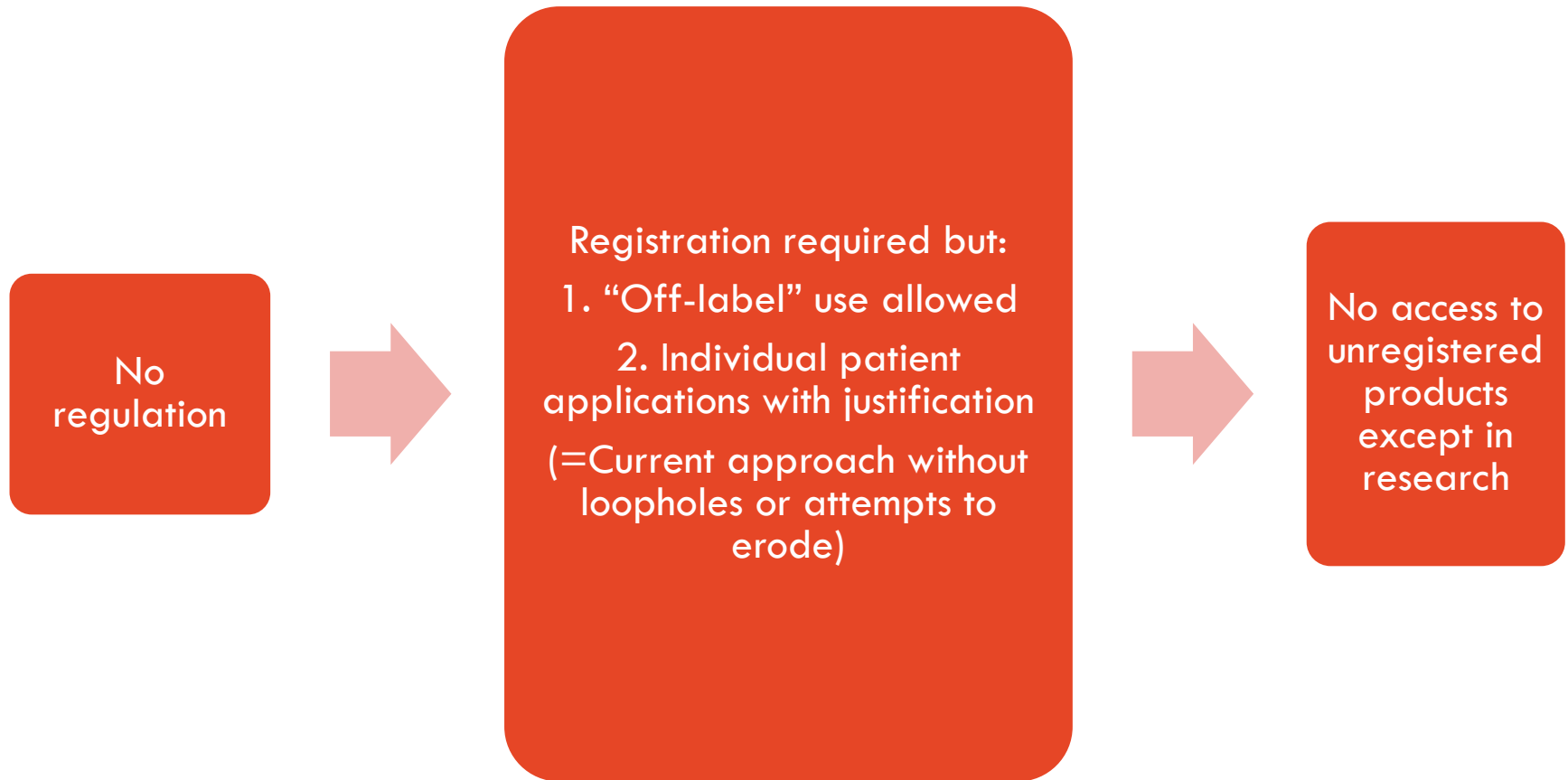
# Clinical practice oversight



# Consumer protection



# Product regulation



# Research oversight



# Broader implications

- Need for global oversight
- Need for wide range of strategies
  - Punishments and rewards
  - “Reputation-enhancing regulatory strategies”

# Conclusion

- Innovation has risks and well as benefits and needs governance
- Pushback against governance based on flawed assumptions
- Need to push back against the pushback