

Four Principles of Biomedical Ethics (Beauchamp & Childress)

Ethical Framework Applied to Medical AI Systems



Beneficence

Providing benefits to patients and pursuing the best outcomes

Improving AI diagnostic accuracy, maximizing treatment effectiveness



Non-maleficence

Do no harm to patients ("First, do no harm")

Minimizing misdiagnosis, safety verification, preventing side effects



Autonomy

Respecting patient self-determination and providing information

Transparent AI explanations, ensuring choice, informed consent process



Justice

Fair access to treatment and resource allocation

Unbiased diagnosis, equal access, ensuring equity

 In actual medical practice, balance among these principles is necessary