

# Digital technology

The rapid pace of [development](#) and [application](#) of digital [technology](#) and [data science](#), including [artificial intelligence](#) (AI), is transforming our world. Somerville et al. address the question: "Is bioethics relevant to how we should develop, govern, and use AI in healthcare, specifically in neurosurgery?" We recognize that medical [decision-making](#) involves complex [uncertainty](#), and predicting potential outcomes is difficult. They conclude that the use of AI in neurosurgery is not inherently unethical. Hence, the ethical question becomes: Do its benefits and potential benefits of neurosurgery outweigh its risks and harms, and what safeguards are needed to ensure this? Requiring and obtaining patients' valid informed consent is important, but what such consent requires is debatable. Earning and maintaining the trust of everyone involved, especially patients and clinicians, is also essential. They recommend that to ensure the ethical development and use of AI, neurosurgeons approach its use with knowledge of both the science of AI and applied [ethics](#), and employ moral [humility](#) and moral courage in their decision-making <sup>1)</sup>

<sup>1)</sup>

Somerville MA, Buchlak QD, Bennett CC. Focusing a [Bioethics](#) Lens on the Development and Use of [Artificial Intelligence](#) in Medicine and Neurosurgery. Adv Exp Med Biol. 2024;1462:529-542. doi: 10.1007/978-3-031-64892-2\_33. PMID: 39523288.

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