## Religious considerations for the use of porcine xenografts

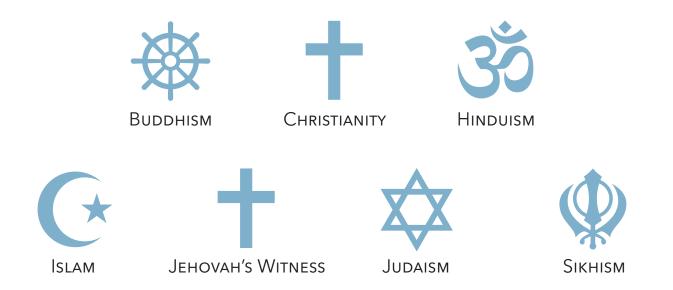
Animal-derived products are used in many fields of modern medicine, which may conflict with a person's religious beliefs.<sup>1</sup> Treatment options during surgery may be affected if surgical products contain prohibited materials.<sup>2</sup>

Cook Biotech recognizes that patients may hold strong cultural and religious beliefs regarding porcine and other animal-derived products used for medical treatment.

While religious leaders have made their opinions on animal-based medical products public based on their respective religious texts, there is some variability based on sect or denomination. Furthermore, many patients have their own opinions on these matters that may not completely align with a religion's published stance.

Because there is little centralized information on this topic readily available, Cook Biotech has created this overview of published, peer-reviewed literature for clinicians. It outlines basic religious beliefs regarding animal-derived medical treatments to assist healthcare providers when advising patients.

Cook Biotech recommends that a patient's individual desires regarding the use of porcine or other animal products for medical treatment are followed, overriding other guidance. Cook Biotech strongly recommends obtaining a patient's informed consent and documenting the discussion in the patient's medical record.





Religion, estimated number of adherents <sup>1</sup>	Restrictions on porcine products
Christianity 1.92 billion	<ul> <li>Christianity approves of the use of animal-derived products with informed consent.<sup>1</sup></li> <li>Allogeneic and xenogeneic acellular grafts are acceptable among Scientologists, Baptists, Lutherans, Evangelicals, and Catholics. Methodists and members of The Church of Jesus Christ of Latter-day Saints leave the decision up to the individual.<sup>3</sup></li> <li>Although Seventh-day Adventists encourage vegetarianism and prohibit the consumption of pork, they do not restrict the use of bovine or porcine surgical products.<sup>3</sup></li> <li>Conclusion: The use of animal-derived products in surgery is approved with informed consent.</li> </ul>
Jehovah's Witness 14.8 million	<ul> <li>Jehovah's Witnesses forbid the use of blood-derived products.<sup>1</sup></li> <li>Jehovah's Witnesses refuse blood transfusions for Bible-based reasons, but all other medical matters are left up to each patient.<sup>3</sup></li> <li>Conclusion: The use of animal-derived products (except blood-derived products) in surgery is approved with informed consent.</li> </ul>
Judaism 15 million	<ul> <li>Judaism approves of the use of animal-derived products with informed consent.<sup>1</sup></li> <li>If a porcine product is used to save a Jewish life, all religious laws are automatically suspended; Jewish law permits the violation of certain rules to achieve the higher good of protecting life.<sup>2</sup></li> <li>Although Jewish law prohibits the oral consumption of mammalian products deemed to be nonkosher, there are no laws regarding the nondietary use of nonkosher products. Therefore, there are no restrictions on the use of porcine surgical or medical products, even if the product is "consumed" or "remodeled" by natural processes following implant.<sup>3</sup></li> <li>Animal or artificial parts—e.g., porcine valves—and, if they prove viable, full organs, may be used to save life and restore health.<sup>4</sup></li> <li>In situations where porcine products are to be used, the position of religious leaders may need to be considered. Jewish law is binding, and a Jewish patient will likely want to know or follow the rabbi's interpretation of it; therefore, it is imperative that surgeons liaise with a patient's rabbi before any surgery that uses porcine products.<sup>2</sup></li> <li>Conclusion: The use of animal-derived products in surgery is approved with informed consent, but the use of porcine-derived products may vary based on the local rabbi's interpretation of Jewish law.</li> </ul>



Religion, estimated number of adherents <sup>1</sup>	Restrictions on porcine products
Islam 1.06 billion	<ul> <li>Islam does not approve of the use of porcine-derived drugs, dressings, or implants except when no alternative is available and the treatment is considered life-prolonging.<sup>1</sup></li> <li>If there is no alternative to porcine-derived products, Sunni Muslims require their use since human life is considered more sacred than anything otherwise forbidden.<sup>1</sup></li> <li>Allah Almighty states that " necessities overrule prohibitions," and although pork is specifically prohibited in the diet, it is acceptable in certain situations where no lawful alternative is found.<sup>2</sup></li> <li>A Muslim patient should be involved in decisions for medical treatment and may wish to consult with the local imam to ensure that the animal-derived surgical product is acceptable.<sup>2</sup></li> <li>Conclusion: Generally, the use of porcine-derived products in surgery should be withheld unless no alternative is available and the treatment prolongs life.</li> <li>Even then, the decision to use porcine-derived products should involve the patient in consultation with the local imam.</li> </ul>
Hinduism 822 million	<ul> <li>Hinduism is very much decentralized, and there is not one standard set of beliefs. Each Hindu has his or her own individual tradition, scripture, and scholar for reference.</li> <li>Generally, Hinduism does not approve of the use of porcine-derived drugs, dressings, or implants except in emergencies or when reasonable alternatives are not available.<sup>1</sup></li> <li>Some Hindu sects may categorically prohibit any substance made of animal products for the treatment of human diseases, always recommending medicines prepared from herbs or the combination of alchemic substances.<sup>3</sup></li> <li>Conclusion: The use of porcine-derived products in surgery may vary from acceptable to forbidden among Hindu patients, so individual patient consent for their use is imperative.</li> </ul>
Sikhism 23 million	<ul> <li>Sikhism does not approve of the use of animal-derived products except in emergencies or when reasonable alternatives are not available.<sup>1</sup></li> <li>Conclusion: The use of porcine-derived products in surgery should be reserved for emergencies or when reasonable alternatives are not available.</li> </ul>
Buddhism 329 million	<ul> <li>Buddhism approves of the use of animal-derived products with informed consent.<sup>1</sup></li> <li>Buddhist teachings may lead some followers to refuse biologic tissues obtained through the intentional killing of animals.<sup>3</sup></li> <li>Conclusion: The use of animal-derived products in surgery is approved with informed consent.</li> </ul>



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## References

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