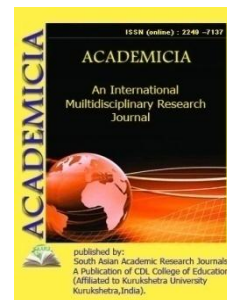


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## **A REVIEW ON TRANSGENIC ANIMALS PRODUCE HUMAN ANTIBODIES**

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### **ABSTRACT**

*Laboratory mice offer a convenient supply of monoclonal antibodies with a wide range of affinity or specificity (mAbs). The intrinsic immunogenicity of rodent antibodies has hampered the development of these molecules as medicinal treatments. The use of transgenic mice producing repertoires of human antibody genetic codes has been investigated as a method of producing low immunogenicity mAbs for in vivo treatment. Over a dozen pharmaceutical as well as biotechnology firms have already used this technique to create novel therapeutic mAbs, and there are now at least 33 medicines in clinical testing—including many in pivotal trials—that include variable sections expressed by human sequences from transgenic mice. The preliminary results from these studies provide a peek into the safety and effectiveness concerns that these compounds may face. Nonetheless, real product approval is needed to properly verify this technology as a medication discovery tool, which is the greatest hurdle thus far. It may be feasible to expand this technique beyond rodents in the future by using transgenic farm animals to create and synthesize human sequence polyclonal sera directly.*

**KEYWORDS:** *Antibodies, Biotechnology, Transgenic Animals, Therapeutic Mabs.*

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