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Towards 3R (Replacement, Reduction, Refinement) Approaches: Bioengineering Tools and Technologies as Advanced Alternatives to Animal Testing

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Message from the Guest Editors

The current Special Issue wants to highlight new and advanced bioengineering tools and technologies for developing better and more predictive alternative methods, whose integrated application could lead to a drastic reduction of animal use in the whole field of biomedical research, from basic research and tissue engineering studies to drug testing and toxicological screening.

- 3D in vitro models of cells/tissues/organs;
- Biomimetic bioreactors, microfluidics, and organ-on-chips;
- Sensors and monitoring devices for 3D in vitro cultures;
- Test bench technologies;
- In silico approaches.



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Special Issue



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Message from the Editor-in-Chief

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