**Kidney Tissue Engineering in Preclinical Models of Renal Failure: A Systematic Review and Meta-analysis**

**PubMed search protocol; search date: 23 May 2021, number of results: 7,645; P: population, I: intervention**.

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| P | ("uremia"[MeSH Terms] OR ("kidney"[MeSH Terms] AND "ischemia"[MeSH Terms]) OR "renal artery obstruction"[MeSH Terms] OR "renal insufficiency"[MeSH Terms] OR "kidney diseases"[MeSH Terms] OR "uremi\*"[Title/Abstract] OR "uraemi\*"[Title/Abstract] OR (("kidney\*"[Title/Abstract] OR "renal"[Title/Abstract]) AND ("wound\*"[Title/Abstract] OR "injur\*"[Title/Abstract] OR "ischaemi\*"[Title/Abstract] OR "ischemi\*"[Title/Abstract] OR "postischemi\*"[Title/Abstract] OR "post ischemi\*"[Title/Abstract] OR "post ischaemi\*"[Title/Abstract] OR "postischaemi\*"[Title/Abstract] OR "failure"[Title/Abstract] OR "disease\*"[Title/Abstract] OR "insufficien\*"[Title/Abstract])) OR (("kidney\*"[Title/Abstract] OR "renal"[Title/Abstract]) AND "arter\*"[Title/Abstract] AND "obstruction"[Title/Abstract]) OR "nephrotoxic\*"[Title/Abstract]) |
| I | ("tissue engineering"[MeSH Terms] OR "regenerative medicine"[MeSH Terms] OR "biocompatible materials"[MeSH Terms] OR "tissue scaffolds"[MeSH Terms] OR "hydrogels"[MeSH Terms] OR "biomimetic materials"[MeSH Terms] OR "bioprinting"[MeSH Terms] OR "printing, three dimensional"[MeSH Terms] OR "bioartificial organs"[MeSH Terms] OR "artificial organs"[MeSH Terms] OR "kidneys, artificial"[MeSH Terms] OR "bioengineering"[MeSH Terms] OR "guided tissue regeneration"[MeSH Terms] OR ("tissue\*"[Title/Abstract] AND "engineer\*"[Title/Abstract]) OR "scaffold\*"[Title/Abstract] OR "hydrogel\*"[Title/Abstract] OR "biomaterial\*"[Title/Abstract] OR "bio material\*"[Title/Abstract] OR "acellular\*"[Title/Abstract] OR "decellular\*"[Title/Abstract] OR "recellular\*"[Title/Abstract] OR "bioartificial"[Title/Abstract] OR "bio-artificial"[Title/Abstract]) |

**Embase search protocol; search date: 23 May 2021, Number of results: 14,814; P: population, I: intervention.**

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| P | 'kidney injury'/exp OR 'kidney ischemia'/exp OR 'nephrotoxicity'/exp OR 'kidney failure'/exp OR 'kidney disease'/exp OR 'ur$emi\*':ti,ab OR (kidney\* NEAR/3 injur\*):ti,ab OR (renal NEAR/3 injur\*):ti,ab OR (kidney\* NEAR/3 isch$emi\*):ti,ab OR (kidney\* NEAR/3 post$isch$emi\*):ti,ab OR nephrotoxic\*:ti,ab OR (kidney\* NEAR/3 failure):ti,ab OR (kidney\* NEAR/3 disease\*):ti,ab |
| I | 'tissue engineering'/exp OR 'regenerative medicine'/exp OR 'biomaterial'/exp OR 'tissue scaffold'/exp OR 'hydrogel'/exp OR 'decellularization'/exp OR 'recellularization'/exp OR (tissue$ NEAR/3 engineer\*):ti,ab OR bio$material$:ti,ab OR (tissue$ NEAR/3 scaffold\*):ti,ab OR self$assembl\*:ti,ab OR 'biocompatible materials'/exp OR 'biomimetic materials'/exp OR 'bioprinting'/exp OR 'printing, three-dimensional'/exp OR 'bioartificial organs'/exp OR 'artificial organs'/exp OR 'kidneys, artificial'/exp OR 'bioengineering'/exp OR 'guided tissue regeneration'/exp OR 'scaffold\*':ab,ti OR 'hydrogel\*':ab,ti OR 'biomaterial\*':ab,ti OR 'bio$material\*':ab,ti OR 'acellular\*':ab,ti OR 'decellular\*':ab,ti OR 'recellular\*':ab,ti OR 'bio$artificial':ab,ti OR (organ NEAR/3 development):ti,ab |