**Table 2**: Advantages and disadvantages of existent models of arterial injury.

|  |  |  |  |
| --- | --- | --- | --- |
| **Model** | **Animals** | **Advantages** | **Disanvantages** |
| **Diet-induced native atherosclerosis** | Small | * mimics the atherosclerosis pathology * ease of handling * no surgery * no stress for the animals * low costs related to animal purchase and care * availability of various transgenic and knockout strains | * low reproductibility * high variance * increased animal’s number required * increased waiting time |
| Big | * mimics the atherosclerosis pathology * ease of handling * no surgery * no stress for the animals | * low reproductibility * high variance * increased animal’s number required |
| **Balloon dilatation** | Small | * mimics restenosis after balloon angioplasty * low costs related to animal purchase and care * availability of various transgenic and knockout strains | * small size of the main arteries * requires qualified surgical expertise * balloons very expensive * denudation is made on the normal arterial wall * existence of appropriate equipment * risks of complications as bleeding or paralysis |
| Big | * mimics restenosis after balloon angioplasty * ease of handling * use of devices for humans | * denudation is made on the normal arterial wall |
| **Wire Injury** | Small | * mimics restenosis after balloon angioplasty * ease of handling * minimal mortality rate * low costs related to animal purchase and care * availability of various transgenic and knockout strains * no physical impairment | * small size of the main arteries * requires less qualified surgical expertise * denudation is made on the normal arterial wall * existence of appropriate equipment |
| **Stent implantation** | Small | * mimics restenosis and thrombosis after stent implantation * low costs related to animal purchase and care * availability of various transgenic and knockout strains | * small size of the main arteries * requires qualified surgical expertise * small stents not available * denudation is made on the normal arterial wall * increased mortality * existence of appropriate equipment * risks of complications as bleeding or paralysis |
| Big | * mimics restenosis   and thrombosis after stent implantation   * ease of handling * use of devices for humans | * denudation is made on the normal arterial wall |