**Supplementary Table S1. Methods and devices as used in the German Mouse Clinic for standardized phenotyping of *Ednra*Y129Fmice**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Screen** | **Methods** | **Age (weeks)** | ***Ednra*+/+**  **female/male** | ***Ednra*Y129F/Y129F female/male** | ***Ednra*Y129F/Y129F**  **female/male** | | **References** |
|  |  |  |  |  |  |  | |
| **Behavior** | Open Field test | 8-9 | 9/10 | 10/10 | 10/10 | Mandillo et al. 2008 | |
| Prepulse Inhibition (PPI), Acoustic Startle Reflex (ASR) | 10-11 | 9/10 | 10/10 | 10/10 |  | |
|  |  |  |  |  |  |  | |
| **Cardiovascular** | Echocardiography (ECHO) | 14 | 9/10 | 10/13 | 10/7 | Sahn et al. 1978 | |
| Electrocardiogramm (ECG) | 14 | 9/10 | 10/13 | 10/7 | Desai et al. 1997; Mitchell et al. 1998 | |
|  |  |  |  |  |  |  | |
| **Clinical Chemistry** | Clinical chemical parameters measurement | 12 and 14  24  36  52 | 14/15  29/25  14/15  8/5 | 41/48  51/40  26/26  19/7 | 14/12  n.a.  n.a.  n.a. | Rathkolb et al. 2013; Sabrautzki et al. 2012 | |
| Hematological parameters | 12 and 14 | 14/15 | 15/18 | 14/12 | Fuchs et al. 2011 | |
| Non-esterified fatty acid concentration | 12 and 14 | 14/15 | 15/18 | 14/12 |  | |
| Glucose measurement ipGTT | 13 | 15/15 | n.a. | 15/18 | Neff et al. 2013 | |
| Carboxy-terminal collagen cross-link (CTX-1) measurement | 24  36  52 | 7/10  5/10  10/10 | 8/10  8/10  10/9 | n.a.  n.a.  n.a. | Sabrautzki et al. 2013 | |
| **Dysmorphology** | Peripheral quantitative computed tomography (pQCT) | 12  24  36  52 | 10/10  10/12  6/9  9/5 | 10/12  7/13  10/10  10/11 | n.a.  n.a.  n.a.  n.a. | Abe et al. 2006 | |
| Dual-energy X-ray absorptiometry (DXA) | 17 | 10/7 | n.a. | 10/10 | Abe et al. 2006 | |
| **Energy Metabolism** | Energy expenditure | 12 | 15/15 | n.a. | 15/15 | www.tse-systems.com | |
| Body composition | 12 | 15/15 | n.a. | 15/15 |  | |
| **Eye** | Scheimpflug imaging |  |  |  |  | Puk et al. 2013 | |
| Optical coherence tomography | 15 |  |  |  | Haller et al. 2010 | |
| Ocular parameters |  |  |  |  | Puk et al. 2006 | |
| **Neurology** | Auditory Brainstem Response (ABR) | 17 | 10/10 | 10/13 | 10/7 |  | |
| Gait analysis | 17 | 10/10 | 10/13 | 10/7 |  | |

n.a. = not analyzed

**Supplementary References**

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