Flow chart. Generation of mice for mammary transplantation study

$Mat^{+/-}$ (5 mice) x Cre-$ER^{TM/0}$ (5 mice)

$Mat^{Lox/+}$ (5 mice) x $Mat^{Lox/+}$ (5 mice)

(20 mice)

Interbreed to generate 25 breeding pairs.
Euthanize mice with undesired genotypes (150 mice)

$Mat^{Lox/+}$(50 mice)
$Mat^{+/+}$ (50 mice)
$Mat^{+/-}$ (25 mice)
$Mat^{+/+}$ /Cre-ERTM/0 (25 mice)
euthanize 150 mice)

$Mat^{+/-}$/Cre-$ER^{TM/0}$ (25 mice)
x
$Mat^{Lox/Lox}$ (25 mice)

(50 mice)

Generate experimental and control mice. Euthanize mice with undesired genotypes
$Mat^{Lox/+}$ (100 mice)
$Mat^{Lox/-}$ (100 mice)
$Mat^{Lox/-/}$Cre-$ERT^{M/0}$ (50 male mice)
$Matriptase^{Lox/+/}$Cre-$^{ERTM/0}$ (50 male mice) (euthanize 300 mice)

$Mat^{Lox/-}$/Cre-$ER^{TM/0}$

(50 female donor mice)

Transplant mammary gland into recipient Nu/Nu/SCID (50 mice)

$Matriptase^{Lox/+}$/Cre-$ER^{TM/0}$

(50 mice female donor mice)

Transplant mammary gland into recipient Nu/Nu/SCID (50 mice)