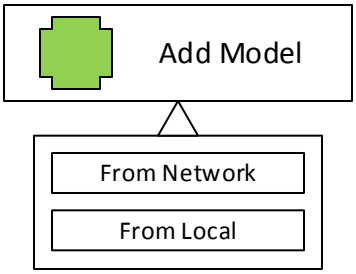
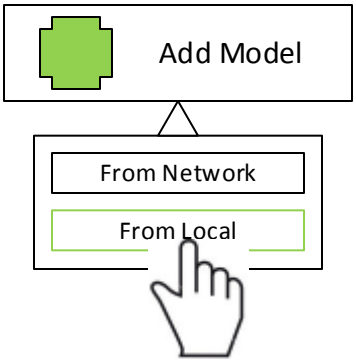
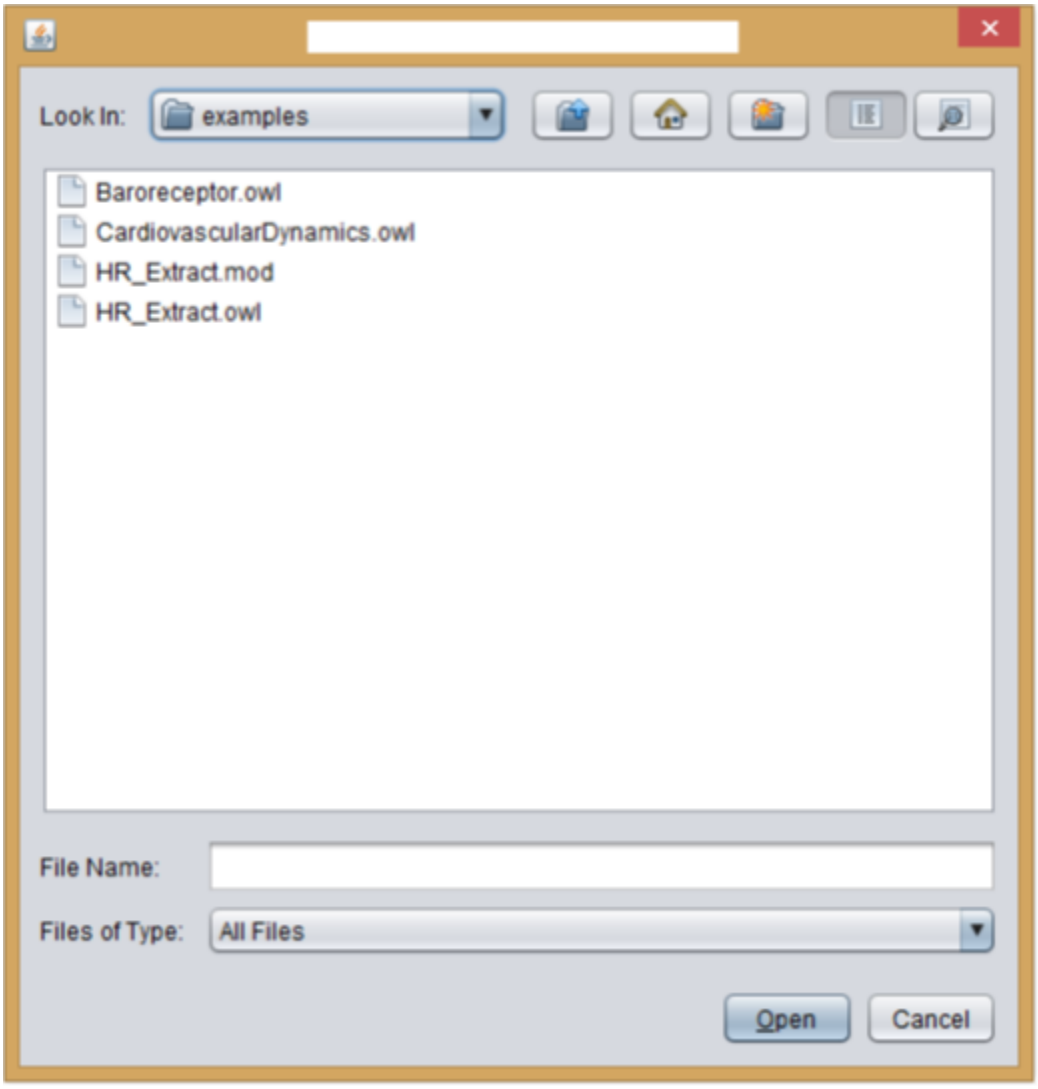


When the composer is empty the “Add Model” flyout is openned

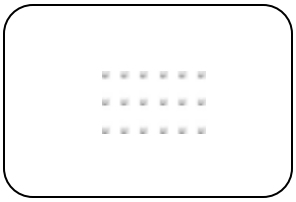


Users can choose a model from their local machine or the network

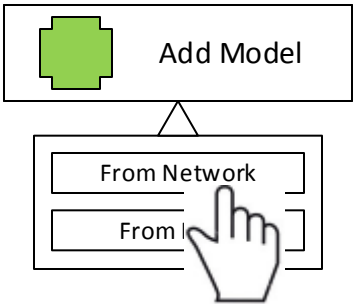
Users select a model from the file picker



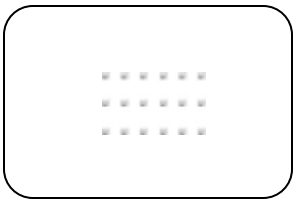
Model D

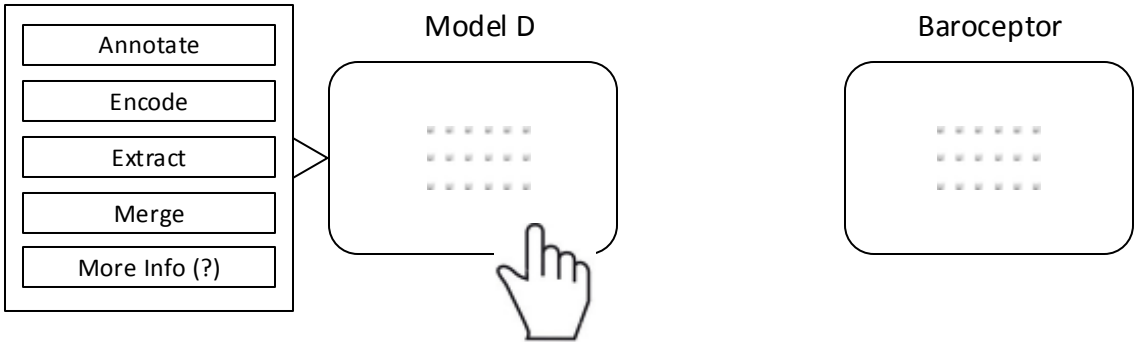


Models are added to the workflow canvas

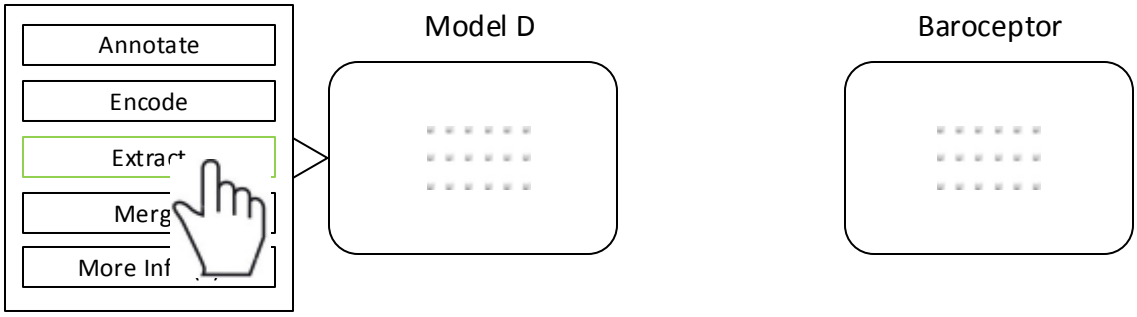


Model D

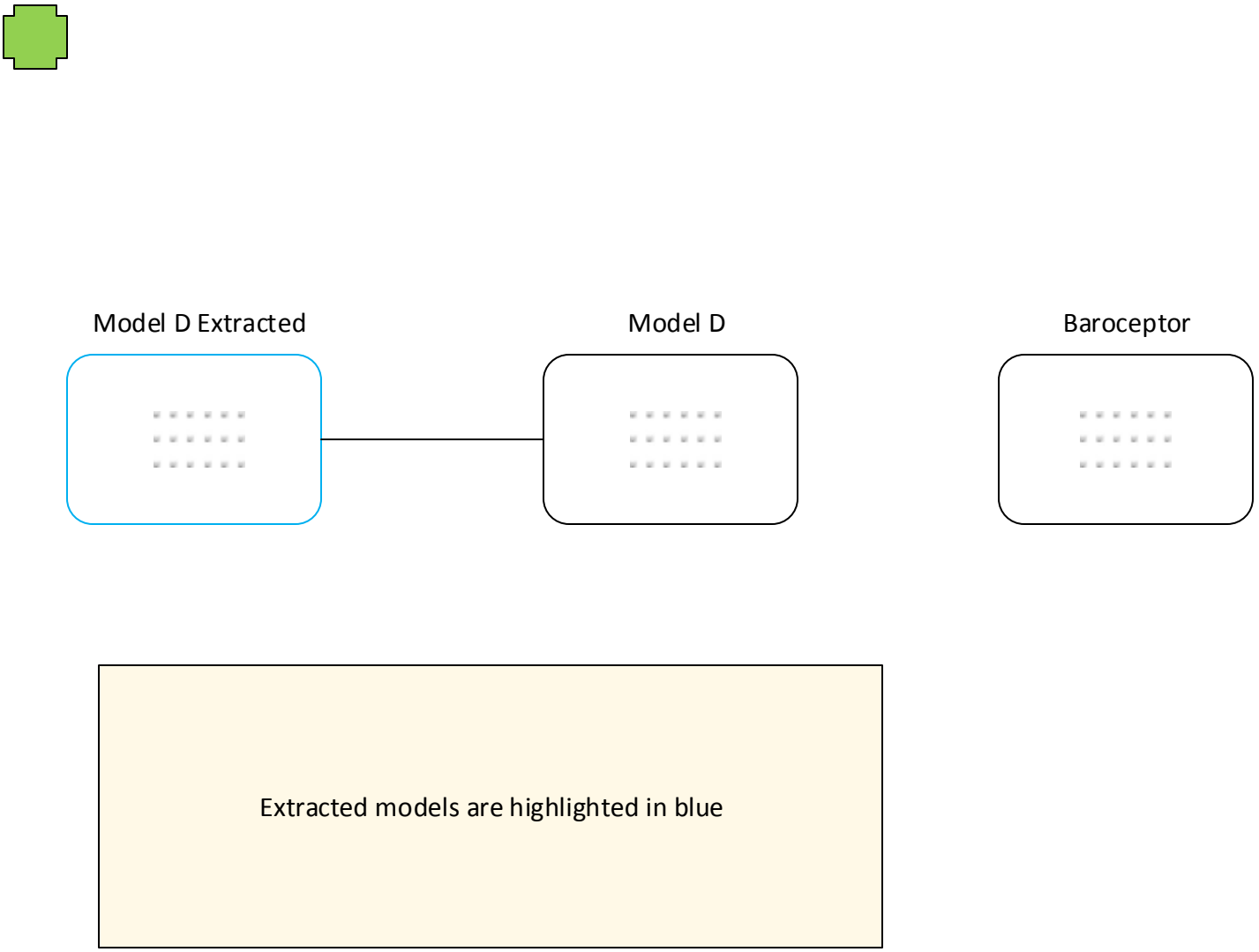




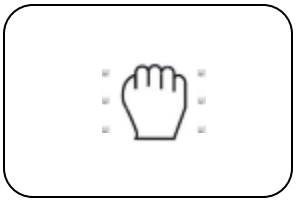
Clicking on a model opens it’s command flyout



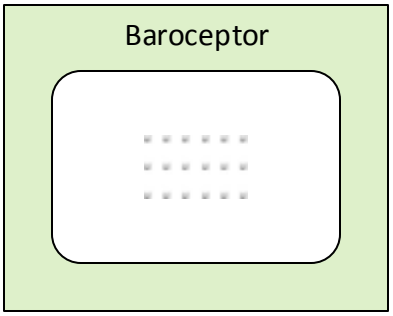
Clicking a command opens its corresponding tool


Model D Extracted
Model D
Baroceptor
Extracted models are highlighted in blue

Model D

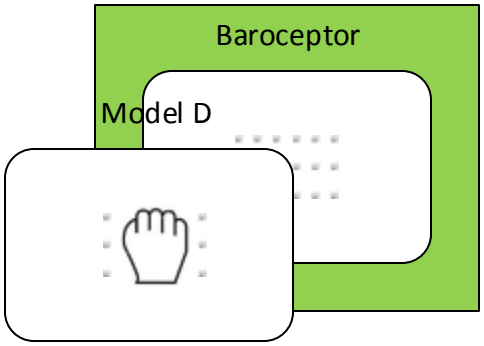


Baroceptor

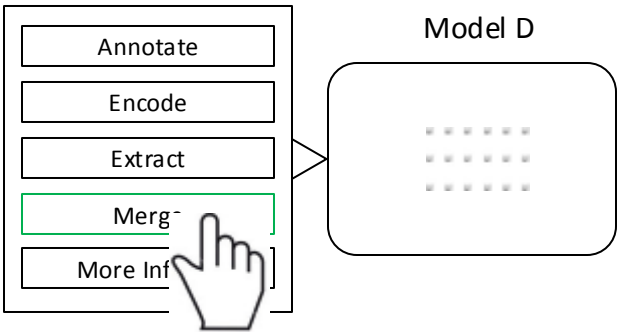


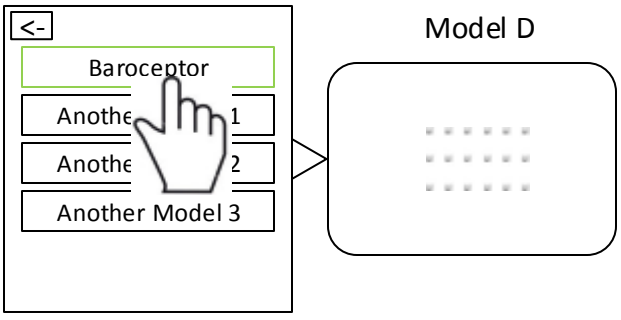
Models are draggable

Models are merged when one is released on top of another



You can also merge models by selecting the Merge command then selecting a model to merge with





“Model D Baroceptor”

Property Maopings

Model D

Baroceptor

?

?

Search...

Name	Symbol	Value	Simularity
Property A	A	mx + b	N/A
Property B	B	mx + b	N/A
Property C	C	mx + b	N/A
Property D	D	mx + b	N/A
Property E	E	mx + b	N/A
Property F	F	mx + b	N/A
Property G	G	mx + b	N/A
Property H	H	mx + b	N/A
Property I	I	mx + b	N/A
Property J	J	mx + b	N/A

Choose a property in Model D to map to a property in Baroceptor

“Model D Baroceptor”

Property Maopings

Model D

Baroceptor

Property A

?

Search...

Name	Symbol	Value	Simularity
Aortic blood pressure	Paop	User defined input	90%
Baroceptor firing rate	Nbr	t = Nbr_t	83%
Baroceptor gain	K	1	47%
Contractility control offset	amin	-2	76%
Heart Rate	HR	h1 + h2*F_hrs - h3*F_hrs^2 ...	100%
Simulation end ti	t.max	12	20%
Simulation start ti	t.min	0	5%
Sympathetic discharge rate at CNS for ...	N_con	If(t > L_con) (N_con* (-1) ...	0%
Time domain for simulation	t	User defined input	10%
Volume of systemic arteries	Vsa	225	0%

Choose a property in Baroceptor to map to “Property A” in Model D.

Heart Rate seems like the right choice.

“Model D Baroceptor”

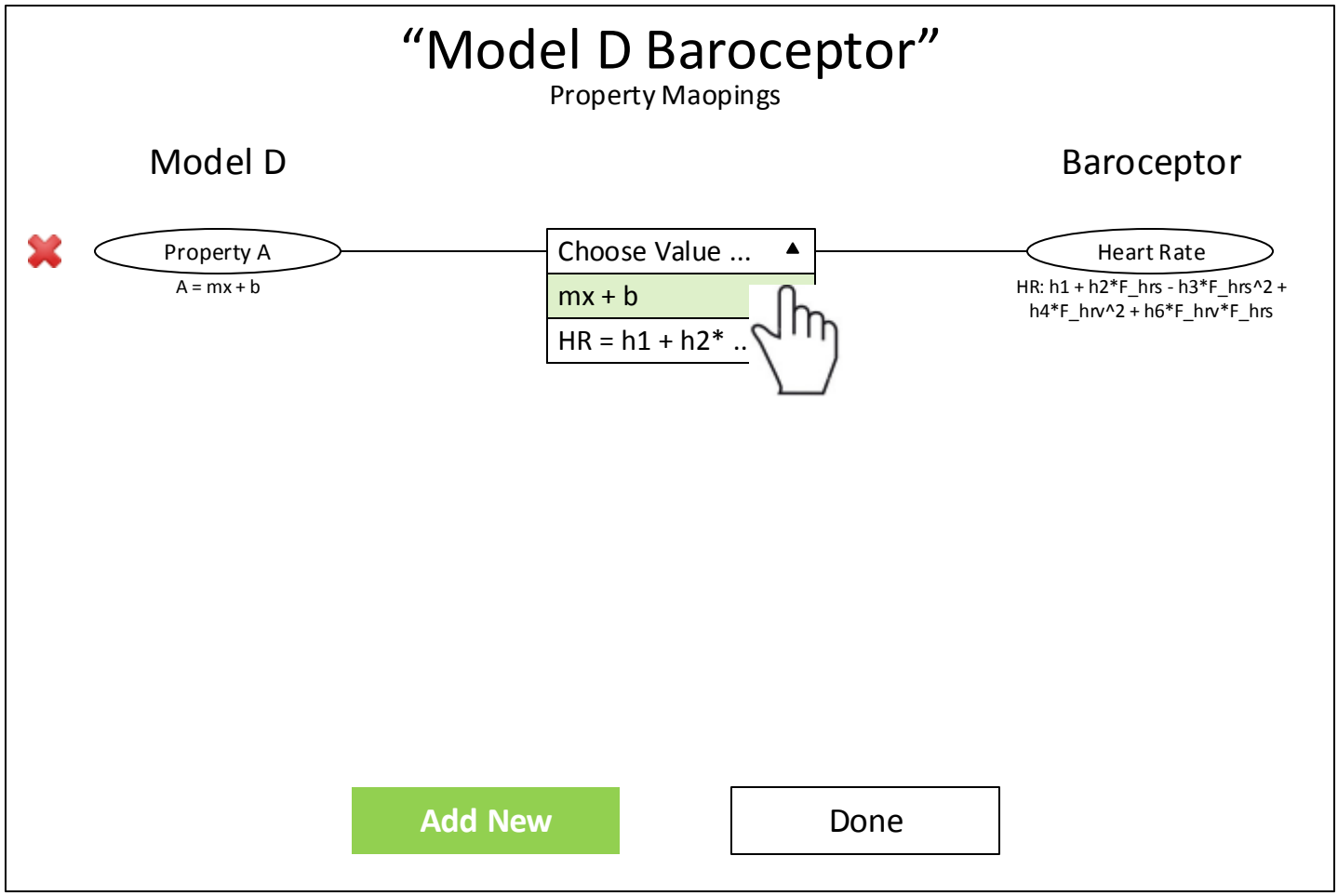
Property Maopings

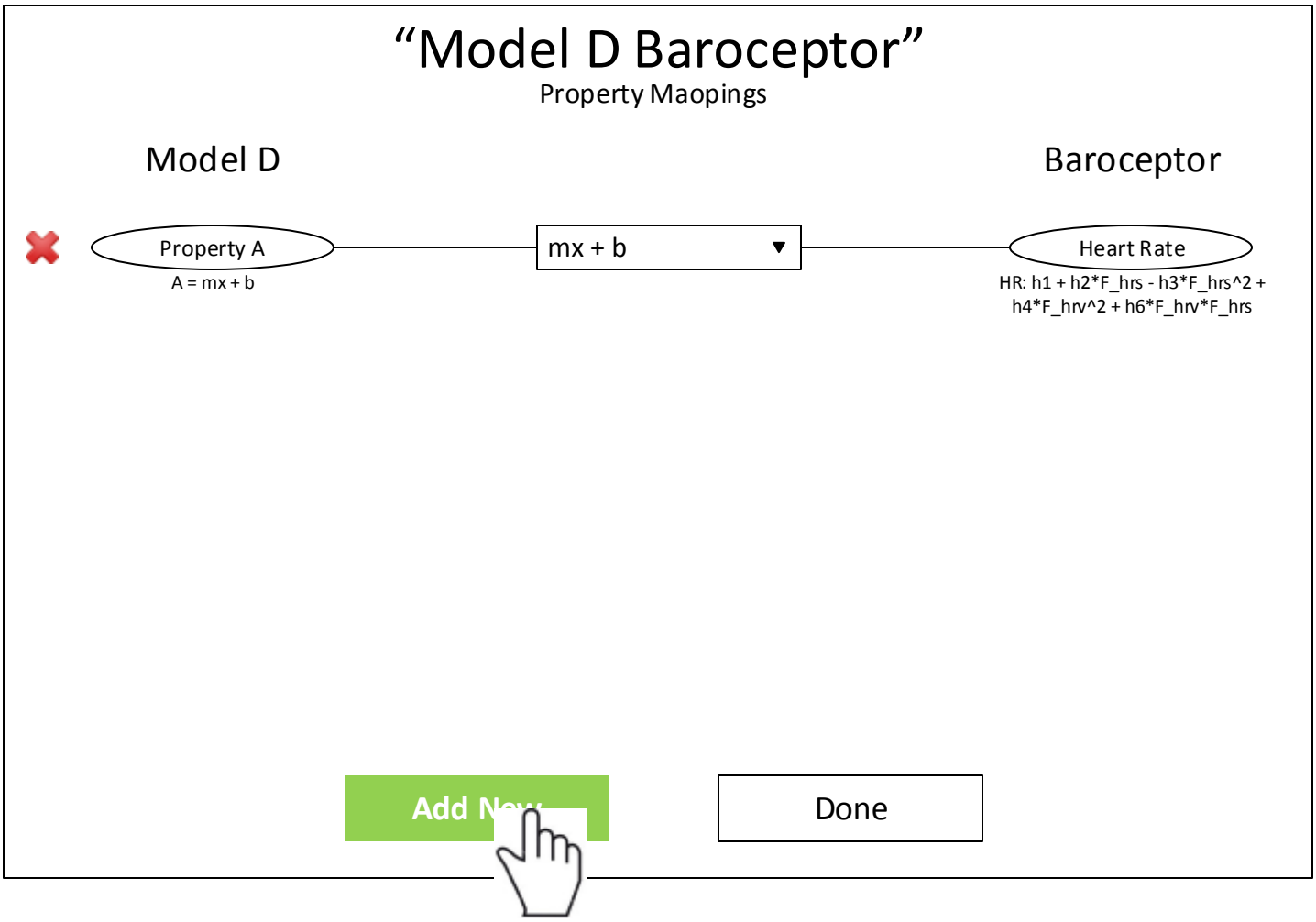
Model D		Baroceptor
Property A A = mx + b	Choose Value ... ▼	Heart Rate HR: h1 + h2*F_hrs - h3*F_hrs^2 + h4*F_hrv^2 + h6*F_hrv*F_hrs

Add New

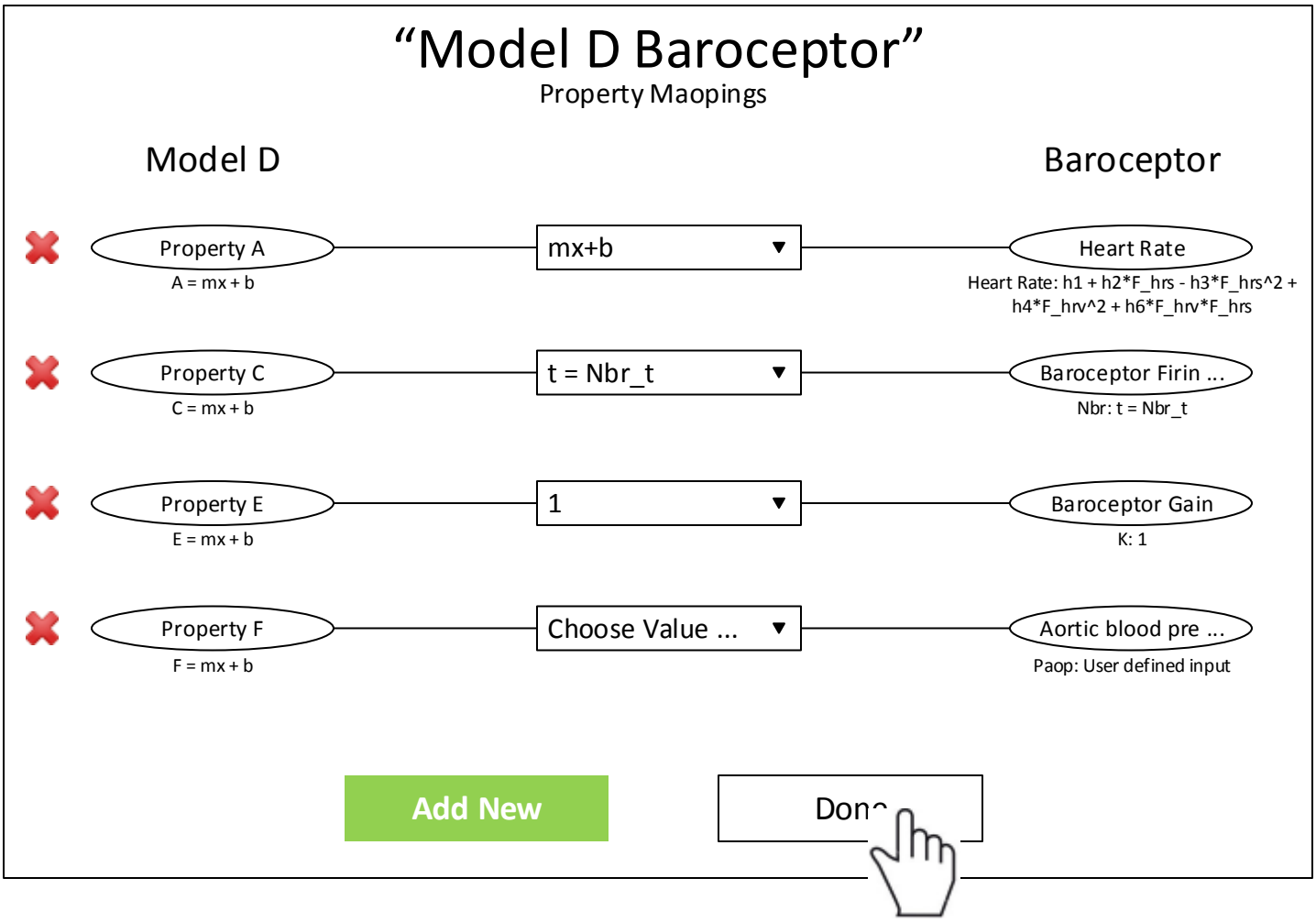
Done

Choose a property value to use in the merged model


“Model D Baroceptor”
Property Maopings
Model D
Baroceptor
Property A
A = mx + b
Choose Value ...
mx + b
HR = h1 + h2* ..
Heart Rate
HR: h1 + h2*F_hrs - h3*F_hrs^2 + h4*F_hrv^2 + h6*F_hrv*F_hrs
Add New
Done

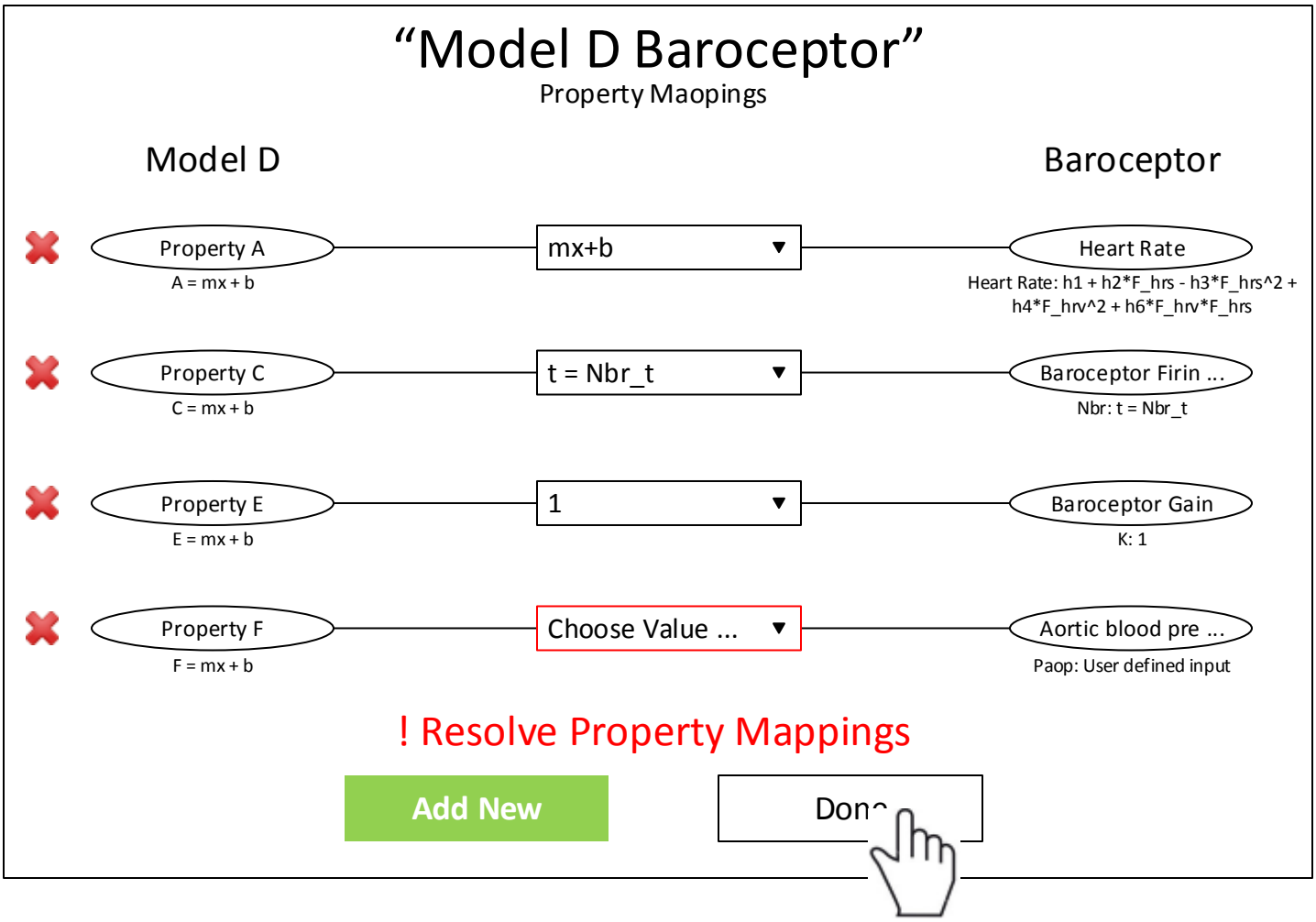


Add a new property mapping

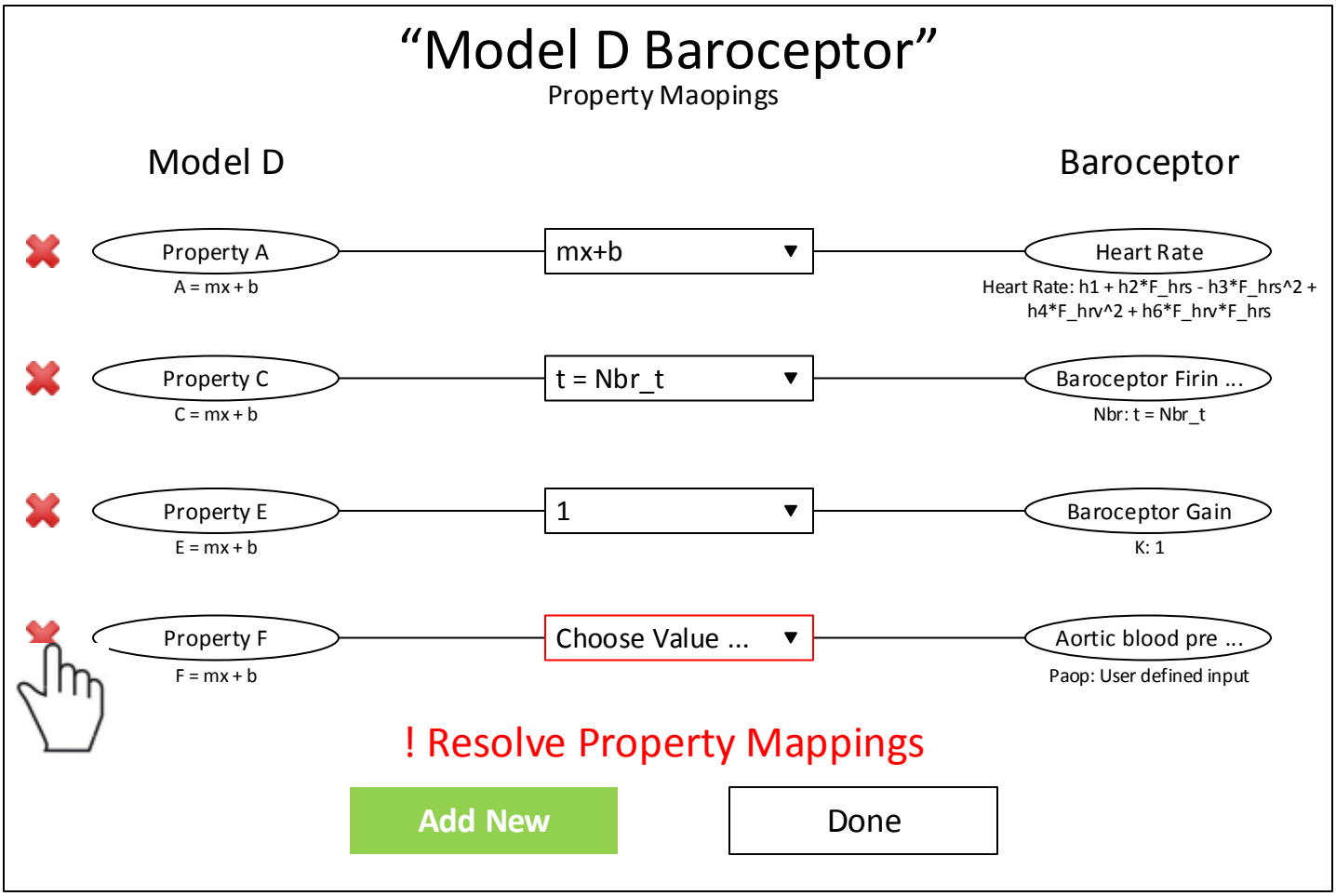


Select Done to return to workflow

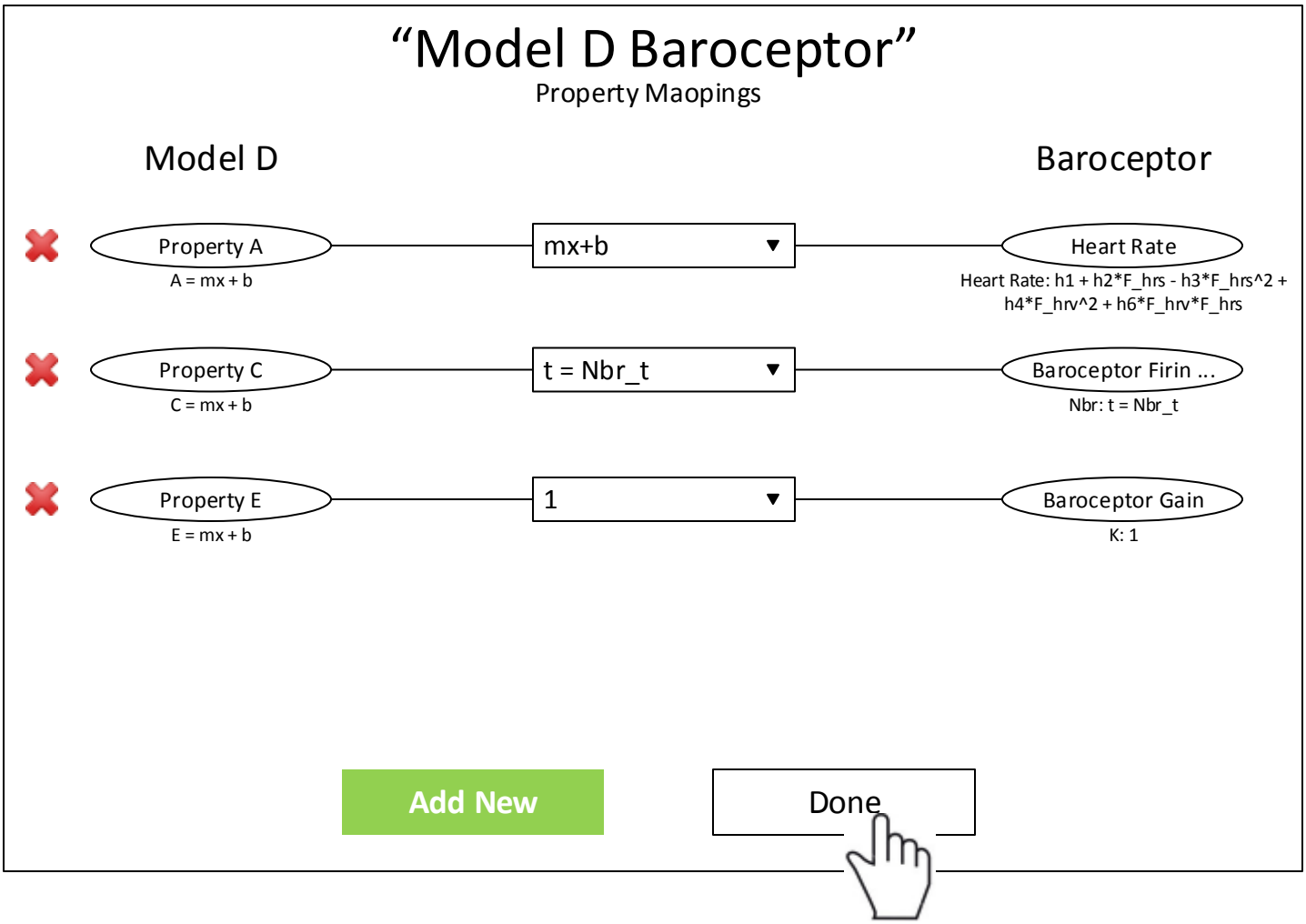
(Note that there exists a property mapping without a value)

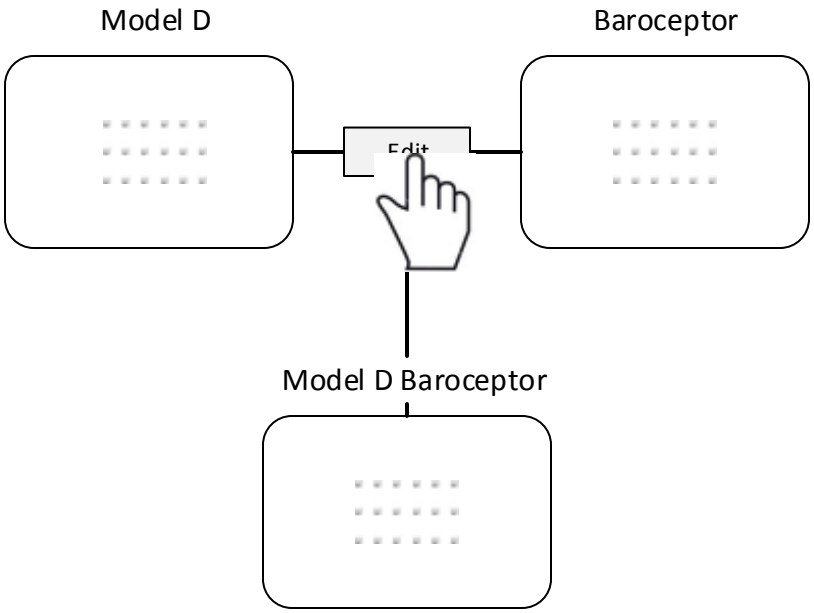


If unresolved property mappings exist show validation errors

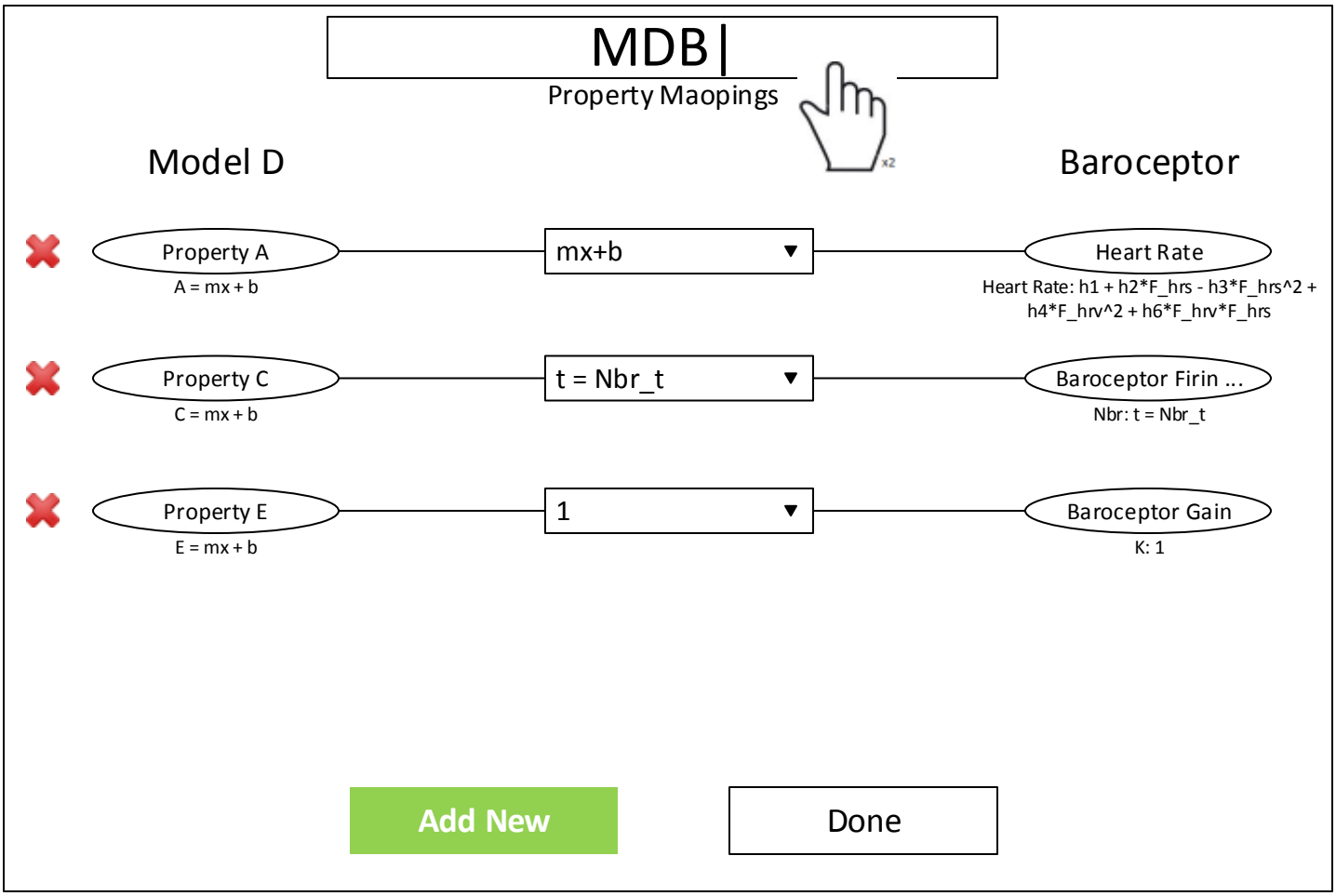


Remove the unresolved property mapping

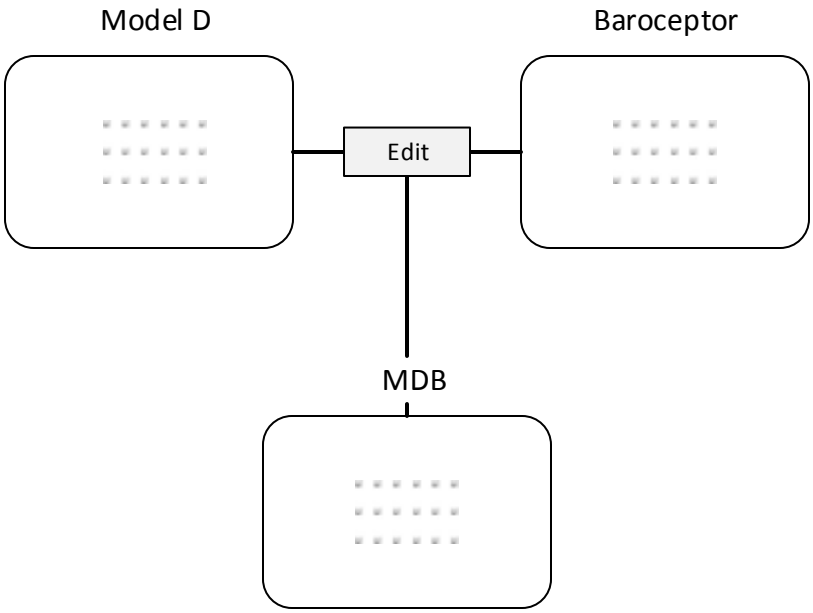

“Model D Baroceptor”
Property Maopings
Model D
Baroceptor
Property A
A = mx + b
mx+b
Heart Rate
Heart Rate: h1 + h2*F_hrs - h3*F_hrs^2 + h4*F_hrv^2 + h6*F_hrv*F_hrs
Property C
C = mx + b
t = Nbr_t
Baroceptor Firin ...
Nbr: t = Nbr_t
Property E
E = mx + b
1
Baroceptor Gain
K: 1
Add New
Done



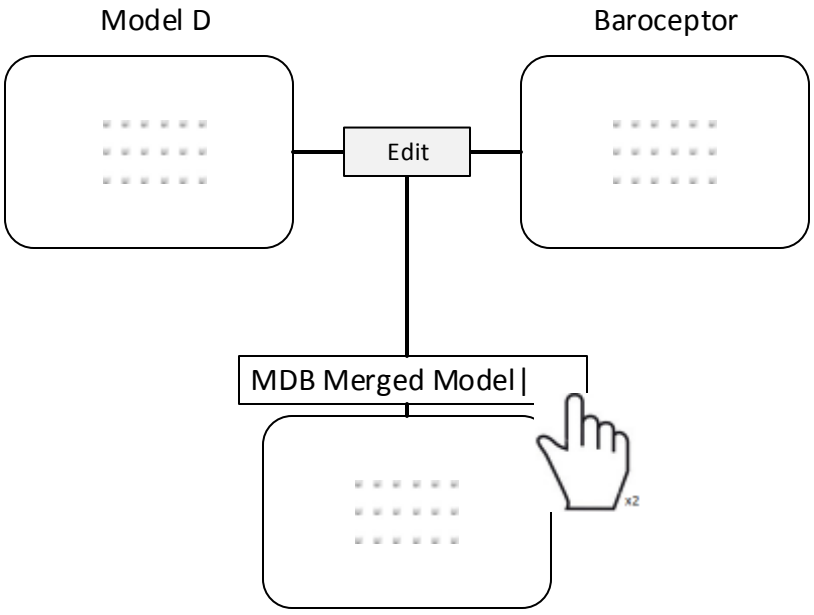
Click edit to update the merged model



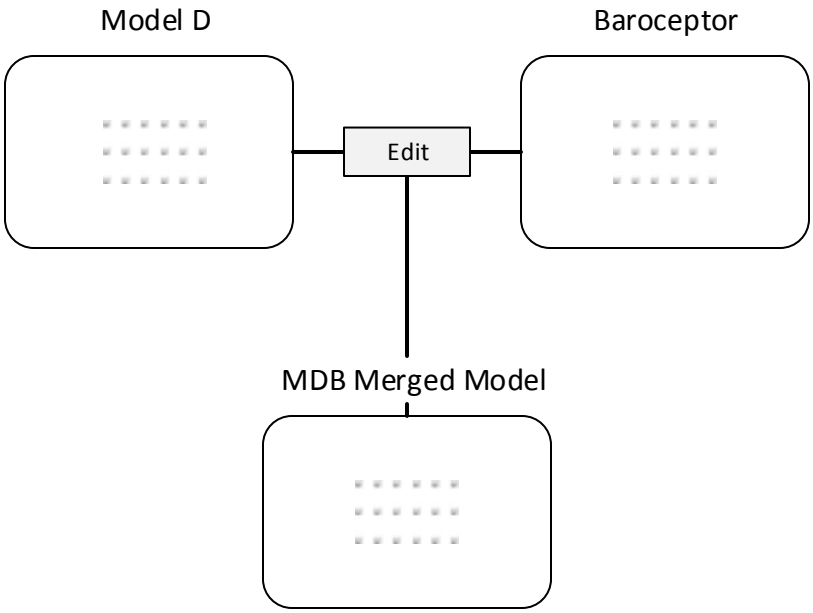
Double click the model's name to change it



A valid merged model with an updated name



Rename a model by double clicking it’s name.



Viola, a merged model with valid property mappings and an update name.