

## Additional file 5:

### Suggested $\text{Ca}^{2+}$ -dependent steps in parasite egress program

<b>Location</b>	<b>Process</b>	<b>Physiological Outcome</b>
<b>Intracellular <math>\text{Ca}^{2+}</math> stores</b>	<b>Release of free <math>\text{Ca}^{2+}</math> from the ER, activation of enzymes involved in parasite egress: PfCDPK5, proteases?</b>	<b>Initiation of parasite egress.</b>
<b>Parasitophorous vacuole/erythrocyte cytoplasm</b>	<b><math>\text{Ca}^{2+}</math> -dependent increase in the PVM permeability to ions: <math>\text{Na}^+</math> and <math>\text{K}^+</math>?</b>	<b>Vacuole swelling due to ion/water fluxes into the vacuole from the host cytoplasm.</b>
<b>Erythrocyte cytoplasm</b>	<b><math>\text{Ca}^{2+}</math>-dependent activation of host protease calpain and release of membrane pore-forming agents.</b>	<b>Digestion of erythrocyte cytoskeleton, poration of erythrocyte membrane and weakening of erythrocyte membrane stability.</b>