1 Supplementary figures

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EA.hy926 cells were transduced with MARVpp encoding an NLuc reporter gene in 6 the presence of increasing concentrations of the six most strongly antiviral CADs of 7 our screen: amiodarone, dronedarone, triparanol, perhexiline, sertraline or clomifene 8 (filled squares). For cytotoxicity measurement, EA.hy-NLuc cells were incubated with 9 increasing concentrations of the same six CADs (empty circles). For both 10 11 approaches, luciferase activity was measured. The replicate values of n=2 or n=3 experiments were normalised to mean solvent control and the IC₅₀ and CC₅₀ values 12 were interpolated from standard curve fitting. 13





Figure S2: Concentration-response curves of MARVpp gp-mediated antiviral
activity and cytotoxicity of the six weakest CADs of our screen.

EA.hy926 cells were transduced with MARVpp and treated with the six CADs with lowest antiviral activity in increasing concentrations: propranolol, tripelennamine, amantadine, promazine, zimelidine or benzylamine (filled squares). Cytotoxicity (empty cirlces) of these compounds was determined in EA.hy-NLuc. Luciferase activity of transduced cells or NLuc cells was detected and normalised replicate values of n = 2 or n = 3 experiments are shown. Concentration-response curves were fitted for interpolation of IC₅₀ and CC₅₀ values.

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Figure S3: Molecular structures of the six strongest and six weakest antiviral

- Dronedarone Triparanol Sertraline CH₃ `CH₃ н CH₃ Amiodarone Perhexiline Clomifene CH₃ CH₃ Propranolol Tripelennamine Amantadine NH_2 'N´ 1 Promazine Zimelidine Benzylamine Ń ۱N H_2N Br
- 27 CADs of our screen.
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30 Figure S4: DIPL of dronedarone-derivatives D-1 and D-2.

Triplicates of EA.hy926 cells were treated with dronedarone and its two derivatives 31 D-1 and D-2 in a 5 µM concentration together with LipidTox[™] Green (1:1). After 6 h, 32 33 fresh medium containing the compounds (without LipidTox[™]) was added for extra 18 h. As controls, cells were left untreated (unstained) or treated with LipidTox[™] in 34 absence of drugs (stained ctrl). Fluorescence measured by FACS represents DIPL 35 induction by CADs. Delta mean fluorescence intensity (Δ MFI) was calculated by first 36 substracting the average solvent control from single values. Averages of n=3 37 38 independent stainings were calculated and plotted against average antiviral activity. Asterisks indicate statistical significance of differences between compounds and 39 stained control that was calculated by One-way ANOVA with correction for multiple 40 comparisons. (*p<0.01; **p<0.001;***p<0.0001) 41

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