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## Background

The ‘Medicines Chest’ is an initiative by the ECNP to provide access for researchers to pharmacological tools in order to support human experimental medicine studies. This initiative is viewed as particularly important given the recent reduction of research by pharmaceutical companies in this field. The most attractive compounds for inclusion in the Medicines Chest are those that could readily be employed in human studies, for example, compounds that have been shelved by pharmaceutical companies but for which clinical safety packages and possibly drug substance are available. A poll of ECNP members led to short list of 10 mechanisms of action. Based on this, a set of target compounds (selected for stage of development, specificity for the target and potential availability) was generated.

## Status

The response from pharmaceutical companies has, in general, been good, especially from those companies that have pulled out of the CNS area and recognise their roles as ‘good citizens’ to help the field cope with their exit. A summary of the current stage of discussions around the target compounds is presented below. The compounds are categorised according to their likelihood to enter the medicines chest as 1) already in the chest 2) those likely to enter the chest in the near future (probables) 3) those which will possibly enter the medicines chest but where communication with the company involved has been slow or where strategic decisions on the future of the compound are awaited (possibles) and 4) those that our members requested but are currently not available. The compounds in the latter category are largely those where the company prefers not to provide access for academic research because they have on-going development activity.

	Compound	Mechanism
<b>In the chest</b>	Gaboxadol	Extrasynaptic GABA <sub>A</sub> agonist
	Emapunil	Translocator protein agonist (physiological studies only)
	Idazoxan	A2 adrenoceptor agonist (physiological studies only)
<b>Probables</b>	Volinanserin (MDL100907)	5-HT <sub>2A</sub> antagonist
	ADX10061 (NNC687)	Dopamine D <sub>1</sub> antagonist
<b>Possibles</b>	SB-742457	5HT <sub>6</sub> antagonist
	GSK958108	5HT <sub>1a</sub> antagonist
<b>Not available currently</b>	Rimonabant	CB <sub>1</sub> inverse agonist
	GSK2182883	Nicotinic alpha <sub>7</sub> agonist
	Ro4938581	GABA <sub>A</sub> alpha <sub>5</sub> inverse agonist
	Bitopertin	GlyT-1 inhibitor

## **Other agents**

The frequent early termination of development compounds in pharmaceutical companies means that the existence of many interesting compounds is not made known to the wider community. Therefore, in addition to the above, we have commenced discussions with a number of larger pharmaceutical companies in case they can make available agents from the categories above or indeed any other agents that might be of interest to the psychopharmacology community. A number of these discussions are progressing well with the potential for further interesting compounds to enter the medicines chest.

We also welcome any recommendations for additions to the target list and note that the 5-HT<sub>2B</sub> antagonist and D<sub>1</sub> agonist have been added to the original list in response to members' requests.

## **Contracts**

In order to facilitate contractual arrangements, two template contracts are available for potential use between the pharmaceutical companies and academic institutions. Agreement on one of these templates, or a similar version preferred by the company, will be reached when a compound enters the medicines chest and can subsequently be used by other researchers when accessing the compound.

## **Interaction with Industry bodies**

The medicines chest initiative has been discussed with the European Federation of Pharmaceutical Industries and Associations (EFPIA) and the Medical Research Council (MRC). We are collaborating with the ECNP Experimental Medicines Network to potentially develop an application for funding to IMI2, for projects using Medicines Chest compounds in Experimental Medicines Network clinical studies.

## **Funding opportunities**

Once a compound is in the medicines chest, the ECNP encourages grant proposals relating to it from its members. Clearly a number of different grant-providing bodies can be approached but we have spoken with the UK Medical Research Council who have said they would be willing to receive applications based on compounds in the chest. Also, the Stanley Medical Research Institute (SMRI) have registered interest in receiving applications relating to this initiative.

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