



## Company Announcement

### **Avexa's HIV integrase inhibitors show activity against drug-resistant Human Immunodeficiency Virus (HIV) with potential for once-daily dosing**

**Melbourne, Australia, Wednesday 19 September 2012:** Australian biotechnology company Avexa Limited [ASX:AVX] today announced that test results from an independent laboratory in the USA have confirmed the activity of Avexa's proprietary new generation HIV integrase inhibitors against resistant Human Immunodeficiency Virus (HIV).

The results show that Avexa's novel compounds have potent activity against not only the sensitive strains of virus found in untreated persons, but also against resistant HIV – strains which can contain mutations which reduce the activity of the current marketed HIV integrase inhibitors.

The HIV integrase enzyme is essential to the replication of the virus and is the target for the currently marketed drugs raltegravir and elvitegravir, manufactured by Merck and Gilead respectively. However, treatment with these first generation HIV integrase inhibitors can give rise to resistance owing to mutations in the HIV integrase gene, which reduce the effectiveness of these drugs. Furthermore, these current inhibitors require either twice-daily dosing or use of a pharmacological boosting agent to achieve sufficient levels of drug.

Avexa's HIV integrase program is focused on developing a new generation of HIV integrase inhibitor which retains activity against resistant HIV and can be given once a day. A successful optimization program has resulted in a series of compounds from which two leads have been selected for further pre-clinical development with the following characteristics:

- As potent against wild type HIV as the current market leader raltegravir
- Significantly more potent against highly resistant HIV
- A pharmacokinetic profile indicative of once daily dosing without pharmacological boosting

“These novel compounds have advantages over the currently marketed drugs and show great promise as improved, new generation integrase inhibitors,” said Dr Jonathan Coates, Avexa's Chief Scientific Officer and Interim CEO. “Integrase inhibitors have proven to be an effective and well prescribed class of HIV drugs, despite the limitations of resistance and dosing issues. Avexa's compounds overcome these limitations and could prove very valuable second generation drugs.”

The compounds are fully protected by patents recently issued to Avexa.

“It is pleasing to see Avexa's hard work and expertise in developing drugs to overcome resistance making great headway in the HIV integrase area,” said Mr Iain Kirkwood, Avexa's Chairman.

Avexa is committed to realizing the commercial potential of these compounds as well as for apricitabine, its lead HIV nucleoside analogue. “The search for sales and marketing partners for



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apricitabine is progressing well, and we are delighted with the progress made to date,” said Mr Kirkwood.

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### **About Avexa Limited**

Avexa Limited is a Melbourne-based biotechnology company with a focus on discovery, development and commercialisation of small molecules for the treatment of infectious diseases. Avexa’s key projects include apricitabine (ATC) for the treatment of drug-resistant HIV, an HIV integrase program and an antibiotic program for antibiotic-resistant bacterial infections.

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