



Silence Therapeutics plc (“Silence” or the “Company”)

Director’s Dealings

London, 15 February 2010 Silence (AIM: SLN) announces the following purchases of shares in the Company by Directors:

On 12 February 2010, Annette Clancy informed the Company that she purchased on that day 68,284 ordinary shares of 1p each in the Company at 14.49 pence per share. Following this purchase, Ms Clancy has an interest in 68,284 ordinary shares in the Company, representing 0.02 per cent of the issued share capital of the Company.

On 12 February 2010, Jerry Randall informed the Company that he purchased on that day 70,000 ordinary shares of 1p each in the Company at 14.25 pence per share. Following this purchase, Mr Randall has an interest in 120,000 ordinary shares in the Company, representing 0.04 per cent of the issued share capital of the Company.

- Ends -

Silence Therapeutics plc

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Notes to Editors:

About Silence Therapeutics plc (www.silence-therapeutics.com)

Silence Therapeutics plc (AIM: SLN) is a leading global biotechnology company dedicated to the discovery, development and delivery of targeted, systemic RNA interference (RNAi) therapeutics for the treatment of serious diseases. The company possesses multiple proprietary siRNA delivery technology platforms including AtuPLEX, a system that enables the functional delivery of siRNA molecules to targeted diseased tissues and cells, while increasing their bioavailability and intracellular uptake. Through the merger with Intradigm, the group has a second, complementary delivery technology offering safe and effective systemic administration using a library of novel peptide-based biodegradable polycationic polymers.

Additionally, the company has a platform of novel short interfering RNA (siRNA) molecules, AtuRNAi, which provide a number of advantages over conventional

siRNA molecules, including increased stability against nuclease degradation. Silence's unique RNAi assets also include structural features for a next generation of RNAi molecules and additional proprietary siRNA sequences against more than 50 highly valued oncology and other disease targets.

Silence's lead internal product, Atu027, is a proprietary AtuRNAi molecule in clinical development for systemic cancer indications. Atu027 has successfully completed single and repeat dose toxicology and geno-toxicology studies, as well as a 28-day toxicology study using multiple dosing regimens. In June 2009, the company initiated an open-label, single-centre, dose-escalation Phase I study with Atu027 in patients with advanced solid (malignant) tumors involving single, as well as, repeated intravenous administration.

Silence is one of only two companies worldwide with a proprietary position on composition of matter for siRNA therapeutics. In addition, through the merger with Intradigm the group has an impressive proprietary portfolio of siRNA sequences against more than 50 highly valued oncology and other disease targets and has secured an exclusive license to the Zamore patent family from the University of Massachusetts, which covers broad structural features of siRNA design for more potent next generation siRNA sequences.

Silence Therapeutics is based in London, Berlin and Palo Alto, CA, and is listed on AIM.

Forward-Looking Statements

This press release includes forward-looking statements that are subject to risks, uncertainties and other factors. These risks and uncertainties could cause actual results to differ materially from those referred to in the forward-looking statements. All forward-looking statements are based on information currently available to Silence Therapeutics and Silence Therapeutics assumes no obligation to update any such forward-looking statements.

