



## **Newron re-submits US NDA for Xadago® (safinamide)**

**Milan, Italy – September 22, 2016** – Newron Pharmaceuticals S.p.A. (“Newron”) (SIX: NWRN), a biopharmaceutical company focused on the development of novel therapies for patients with diseases of the central nervous system (CNS) and pain, and its partners Zambon S.p.A. and US WorldMeds, LLC, announced today that Newron has re-submitted the New Drug Application (NDA) for Xadago® (safinamide) to the US Food and Drug Administration FDA.

As previously reported, the FDA communicated to Newron in a meeting in July that clinical studies to evaluate the potential abuse liability or dependence/withdrawal effects of Xadago® were no longer required. The meeting had been scheduled following the March 29, 2016 Complete Response Letter (CRL) by the FDA. The FDA agreed that the re-submission did not require any new data/studies/analyses for efficacy or safety in patients with Parkinson’s disease. As a class 2 resubmission, the FDA is expected to complete its review of the re-submission within 6 months of acceptance.

### **About Xadago® (safinamide)**

Safinamide is a new chemical entity with a unique mode of action, including selective and reversible MAO-B-inhibition and blocking of voltage dependent sodium channels, which leads to modulation of abnormal glutamate release. Clinical trials have established its efficacy in controlling motor symptoms and motor complications in the short term, maintaining this effect over 2 years. Results from 24 month double-blind controlled studies suggest that safinamide shows statistically significant effects on motor fluctuations (ON/OFF time) without increasing the risk of developing troublesome dyskinesia. This effect may be related to its dual mechanism acting on both the dopaminergic and the glutamatergic pathways. Safinamide is a once-daily dose and has no diet restrictions due to its high MAO-B/MAO-A selectivity. Zambon has the rights to develop and commercialize Xadago® globally, excluding Japan and other key territories where Meiji Seika has the rights to develop and commercialize the compound. The rights to develop and commercialize Xadago® in the USA have been granted to US WorldMeds, by Zambon.

### **References:**

Two-year, randomized, controlled study of safinamide as add-on to levodopa in mid to late Parkinson's disease. Borgohain, Rupam; Szasz, Jozsef; Stanzione, Paolo; Meshram, Chandrashekhar; Bhatt, Mohit H et al. (2014) *Movement disorders : official journal of the Movement Disorder Society* vol. 29 (10) p. 1273-80.

Anand R: Safinamide is associated with clinically important improvement in motor symptoms in fluctuating PD patients as add-on to levodopa (SETTLE). 17th International Congress of Parkinson’s Disease and Movement Disorders, Sydney, Australia, June 16-20, 2013.

### **About Parkinson’s disease**

PD is the second most common chronic progressive neurodegenerative disorder in the elderly after Alzheimer’s disease, affecting 1-2% of individuals aged ≥ 65 years worldwide. The prevalence of the PD market is expected to grow in the next years due to the increase in the global population and advancements in healthcare that contribute to an aging population at increased risk for PD. The diagnosis of PD is mainly based on observational criteria of muscular rigidity, resting tremor, or postural instability in combination with bradykinesia. As the disease progresses, symptoms become more severe. Early-stage patients are more easily managed on L-dopa. L-dopa remains as the most effective treatment for PD, and over 75% of the patients with PD receive L-dopa. However, long term treatment with L-dopa leads to seriously debilitating motor fluctuations, i.e. phases of normal functioning (ON-time) and decreased functioning (OFF-time). Furthermore, as a result of the use of high doses of L-dopa with increasing severity of the disease, many patients experience involuntary movements known as L-dopa-Induced Dyskinesia (LID). As the disease progresses, more drugs are used as an add-on to what the patient already takes, and the focus is to treat symptoms while managing LID and the “off-time” effects of L-dopa. Most current therapies target the dopaminergic system that is implicated in the pathogenesis of PD, and most current treatments act by increasing dopaminergic transmission that leads to amelioration of motor symptoms.



References:

BMC Oertel. European Handbook of Neurological Management, Vol1, Chapter 14 & 15, 2011.  
NICE PD guideline, 2006.

**About Newron Pharmaceuticals**

Newron (SIX: NWRN) is a biopharmaceutical company focused on the development of novel therapies for patients with diseases of the central nervous system (CNS) and pain. The Company is headquartered in Bresso near Milan, Italy. Xadago® (Safinamide) has received marketing authorization for the treatment of Parkinson's disease in the European Union and Switzerland and is commercialized by Newron's Partner Zambon. US WorldMeds holds the commercialization rights in the US. Meiji Seika has the rights to develop and commercialize the compound in Japan and other key Asian territories. In addition to Xadago® for Parkinson's disease, Newron has a strong pipeline of promising treatments for rare disease patients at various stages of clinical development, including sarizotan for patients with Rett syndrome and ralfinamide for patients with specific rare pain indications. Newron is also developing NW-3509 as the potential first add-on therapy for the treatment of patients with positive symptoms of schizophrenia.

For more information, please visit: [www.newron.com](http://www.newron.com)

**About US WorldMeds, LLC**

US WorldMeds is a specialty pharmaceutical company dedicated to developing, licensing and commercializing unique specialty pharmaceuticals that address unmet medical needs or overcome limitations of existing products. Through sound science and targeted commercialization, the Kentucky-based company continually strives to identify specialty and orphan products for diseases with limited patient populations. US WorldMeds' portfolio includes Revonto® (dantrolene sodium for injection) for the treatment of malignant hyperthermia, MYOBLOC® (rimabotulinumtoxinB) Injection for the treatment of cervical dystonia in adults, APOKYN® (apomorphine hydrochloride injection) for the acute, intermittent treatment of hypomobility, "off" episodes associated with advancing Parkinson's disease and CORGARD (nadolol) for the long-term management of patients with angina pectoris and for the management of hypertension. In addition, US WorldMeds has a full pipeline of products under development including the non-narcotic drug product (Lofexidine) for the treatment of opiate withdrawal symptoms. For more information about US WorldMeds, visit [www.usworldmeds.com](http://www.usworldmeds.com).

**About Zambon**

Zambon is a leading Italian pharmaceutical and fine-chemical multinational company that has earned a strong reputation over the years for high quality products and services. Zambon is well-established in 3 therapeutic areas: respiratory, pain and woman care, and is very strongly committed to its entry into the CNS space. Zambon SpA produces high quality products thanks to the management of the whole production chain which involves Zach (Zambon chemical), a privileged partner for API, custom synthesis and generic products. The Group is strongly working on the treatment of the chronic respiratory diseases as asthma and BPCO and on the CNS therapeutic area with Xadago® (safinamide) for the Parkinson treatment. Zambon is headquartered in Milan and was established in 1906 in Vicenza. Zambon is present in 19 countries with subsidiaries and almost 2,700 employees with manufacturing units in Italy, Switzerland, France, China and Brazil. Zambon products are commercialized in 84 countries.

For details on Zambon please see: [www.zambongroup.com](http://www.zambongroup.com)



**For more information**

Media	Investors and Analysts
<p><b>Newron</b> Stefan Weber - CEO Phone: +39 02 6103 46 30 E-mail: <a href="mailto:ir@newron.com">ir@newron.com</a></p> <p><b>US WorldMeds</b> P. Breckinridge Jones – CEO Phone : +1 502.815.8101 Email : <a href="mailto:pbj@usworldmeds.com">pbj@usworldmeds.com</a></p> <p><b>Zambon</b> Luca Primavera - CCO Phone: +39 02 66524491 Mobile: +39 335 7247417 Email: <a href="mailto:luca.primavera@zambongroup.com">luca.primavera@zambongroup.com</a></p> <p><b>Italy</b> Milva Naguib Phone: +39 02 66524095 Mobile: +39 3459215675 Email: <a href="mailto:milva.naguib@zambongroup.com">milva.naguib@zambongroup.com</a></p> <p><b>UK/Europe</b> Julia Phillips FTI Consulting Phone: +44 (0)20 3727 1000</p> <p><b>Switzerland</b> Martin Meier-Pfister IRF Communications Phone: +41 43 244 81 40</p> <p><b>Germany</b> Anne Hennecke MC Services AG Phone: +49 211 52925222 <a href="mailto:anne.hennecke@mc-services.eu">anne.hennecke@mc-services.eu</a></p> <p><b>USA</b> Alison Chen LaVoieHealthScience Phone: +1 617 374 8800, Ext. 104 <a href="mailto:achen@lavoiehealthscience.com">achen@lavoiehealthscience.com</a></p>	<p><b>Newron</b> Stefan Weber - CEO Phone: +39 02 6103 46 30 E-mail: <a href="mailto:ir@newron.com">ir@newron.com</a></p> <p><b>UK/Europe</b> Julia Phillips FTI Consulting Phone: +44 (0)20 3727 1000</p> <p><b>Switzerland</b> Martin Meier-Pfister IRF Communications Phone: +41 43 244 81 40</p> <p><b>Germany</b> Anne Hennecke MC Services AG Phone: +49 211 52925222 <a href="mailto:anne.hennecke@mc-services.eu">anne.hennecke@mc-services.eu</a></p> <p><b>USA</b> Beth Kurth LaVoieHealthScience Tel.: +1 617 374 8800, Ext. 106 <a href="mailto:bkurth@lavoiehealthscience.com">bkurth@lavoiehealthscience.com</a></p>

**Important Notices**

This document contains forward-looking statements, including (without limitation) about (1) Newron's ability to develop and expand its business, successfully complete development of its current product candidates and current and future collaborations for the development and commercialisation of its product candidates and reduce costs (including staff costs), (2) the market for drugs to treat CNS diseases and pain conditions, (3) Newron's anticipated future revenues, capital expenditures and financial resources, and (4) assumptions underlying any such statements. In some cases these statements and assumptions can be identified by the fact that they use words such as "will", "anticipate", "estimate", "expect", "project", "intend", "plan", "believe", "target", and other words and terms of similar meaning. All statements, other than historical facts, contained herein regarding Newron's strategy, goals, plans, future financial position, projected revenues and costs and prospects are forward-looking statements. By their very nature, such statements and assumptions involve inherent risks and uncertainties, both general and specific, and risks exist that predictions, forecasts, projections



and other outcomes described, assumed or implied therein will not be achieved. Future events and actual results could differ materially from those set out in, contemplated by or underlying the forward-looking statements due to a number of important factors. These factors include (without limitation) (1) uncertainties in the discovery, development or marketing of products, including without limitation negative results of clinical trials or research projects or unexpected side effects, (2) delay or inability in obtaining regulatory approvals or bringing products to market, (3) future market acceptance of products, (4) loss of or inability to obtain adequate protection for intellectual property rights, (5) inability to raise additional funds, (6) success of existing and entry into future collaborations and licensing agreements, (7) litigation, (8) loss of key executive or other employees, (9) adverse publicity and news coverage, and (10) competition, regulatory, legislative and judicial developments or changes in market and/or overall economic conditions. Newron may not actually achieve the plans, intentions or expectations disclosed in forward-looking statements and assumptions underlying any such statements may prove wrong. Investors should therefore not place undue reliance on them. There can be no assurance that actual results of Newron's research programmes, development activities, commercialisation plans, collaborations and operations will not differ materially from the expectations set out in such forward-looking statements or underlying assumptions. Newron does not undertake any obligation to publicly up-date or revise forward looking statements except as may be required by applicable regulations of the SIX Swiss Exchange where the shares of Newron are listed. This document does not contain or constitute an offer or invitation to purchase or subscribe for any securities of Newron and no part of it shall form the basis of or be relied upon in connection with any contract or commitment whatsoever.