Corporate Profile

AOP Orphan Pharmaceuticals AG
THE COMPANY
AOP Orphan has acquired excellent expertise and developed a solid market presence thanks to its long-term experience. The fact that the company is privately owned ensures long-term commitment, high quality and continuity. In some territories AOP Orphan is also the sole provider of key therapies for a number of highly specialized indications.

AOP Orphan closely networks with the leading health care professionals on an international level able to respond quickly to new findings as well as to push both research and development projects forward and therefore to help patients with rare diseases from Austria throughout the world. In the course of doing so, AOP Orphan can call upon a global network of qualified partners and, with the help of these strategic alliances, is able to compete with top pharmaceutical companies.

VISION AND STRATEGY
When founding AOP Orphan in 1996 Dr Widmann aim was to make targeted treatment available to the maximum number of patients with rare diseases, since these patients are frequently left alone in their suffering. As an entrepreneur the complex environment of rare diseases was a great challenge, but also an opportunity to be successful in this niche. Since its very start AOP Orphan has borne the social responsibility of further life quality improvement for patients with severe, rare and life-threatening diseases.

AOP Orphan conducts intensive research for this purpose, believing that developing and providing solutions for patients is the most important part of the AOP Orphan corporate responsibility. When it comes to wanting the best for the patients, the team stands side-by-side with each other, with researches, physicians, therapists, caregivers, patient organizations and other stakeholders.

EUROPEAN PIONEER
AOP Orphan researches, develops, produces and distributes innovative drugs and administration methods for rare diseases – and has become a European pioneer in the field of orphan diseases. Our focus is on the areas of Cardiology & Pulmonology, HematoOncology, Neurology and Metabolic Disorders.

AT A GLANCE
- Established in 1996
- Privately owned
- Headquarters in Vienna
- Offices in thirteen countries
- Over 220 employees
- Turnover excess 102 mio EUR in 2018

BOARD
Dr. Rudolf Widmann
Founder | Chief Therapeutics Development Officer
“As a company, we are small enough to be really close to our patients, yet we are large enough to be able to provide them high-quality, personalized patient care.”

Mag. Andreas Steiner
CEO | Chairman of the Board
“AOP Orphan is the European pioneer in orphan diseases unconditionally committed to bringing not only drugs but full treatment support to patients with rare diseases.”

Dr. Guenther Krumpl
Chief Corporate Development Officer
“AOP Orphan having international expertise in pharmaceutical and clinical development as well as distribution and marketing of drugs in the rare disease area offers flexible solutions for in- and out-licensing partnerships.”
### THERAPEUTIC AREAS AND PRODUCT PORTFOLIO

#### THERAPEUTIC AREAS
AOP Orphan develops and commercializes complex, individualized solutions in the following therapeutic areas:

- Pulmonary arterial hypertension
- Arrhythmia/Tachycardia
- Essential thrombocythemia
- Chronic myelogenous leukemia
- Huntington’s disease
- Primary biliary cholangitis
- Fragile-X-Syndrome
- Rolando-Epilepsy
- Chemotherapy-induced nausea & vomiting (CINV)
- Cardiology & Pulmonology
- HematoOncology
- Neurology & Metabolic Disorders
- HIV-associated lipodystrophy
- Narcolepsy with or without cataplexy
- Septic shock
- Existing Indications
- New Indications

#### PRODUCT PORTFOLIO
In the following areas: Cardiology and Pulmonology, HematoOncology, Neurology and Metabolic Disorders. AOP Orphan works tirelessly to increase its product portfolio for rare diseases.

#### Enispert® (Empressin®)
- Empressin® is used for the treatment of catecholamine refractory hypotension following septic shock in patients older than 18 years. A catecholamine refractory hypotension is present if the mean arterial blood pressure cannot be stabilized to 65 - 75 mmHg despite adequate volume substitution and application of catecholamines.

#### Anagrelide prolonged release
- Anagrelide prolonged release™ is indicated for the treatment of essential thrombocythemia for the reduction of platelet aggregation.

#### ESMELOL / Esmocard®
- Esmolol / Esmocard® is indicated for supraventricular tachycardia and for the rapid control of the ventricular rate in patients with atrial fibrillation or atrial Flutter in peripartum, postoperative, or other circumstances where short-term control of the ventricular rate with a short-acting agent is desirable.

#### BUSILVEX®
- Busilvex® is indicated for conditioning before hematopoetic stem cell transplantation.

#### Ospolot®
- Ospolot® is indicated for the treatment of Rolando-Epilepsy.

#### Naloxone hydrochloride
- Naloxone hydrochloride is for complete or partial reversal of CNS and especially respiratory depression, caused by natural or synthetic opioids.

### PIPELINE
In addition to its current portfolio, AOP Orphan also has a very promising product development pipeline, which is set to deliver a number of market-ready products in the next few years. These range from a particularly fast-acting beta blocker for tachycardic patients to rorpeginterferon alfa-2b for patients with Polycythemia vera, a bone marrow disorder characterized by overproduction of red blood cells.

### RESEARCH AND DEVELOPMENT
AOP Orphan invests a substantial share of its turnover in research and development, operating at an international level in doing so. Research is conducted across Europe, with a particular focus on Central Europe, and covers the entire range of different development stages.

The company performs both early clinical trials and multinational pivotal trials with patients across Europe. Furthermore, clinical studies are performed with already approved products in order to optimize administration or to make the drug available for additional groups of patients.

**Note:** The medicinal products listed may not be authorized for marketing in every country listed in this brochure.
RECENT PUBLICATIONS

ROPEGINTERFERON ALFA-2B

Ropeginterferon alpha-2b targets JAK2V617F-positive polycythemia vera cells in vitro and in vivo
Emmanuelle Verger • et al. Blood, 8-94, 2018

Ropeginterferon Alfa-2b Induces High Rates of Clinical, Hematological and Molecular Responses in Polycythemia Vera: Two-Year Results from the First Prospective Randomized Controlled Trial
Heinz Gisslinger • et al. American Society Hematology ASH Annual Meeting 2017, oral presentation

Molecular response to hydroxyurea and ropeginterferon alfa-2b in the PROUD-PV randomized phase 3 trial
Jean-Jacques Kiladjian • et al. European Hematology Association EHA Annual Meeting 2017, oral presentation

Final results from PROUD-PV a randomized controlled phase 3 trial comparing Ropeginterferon alfa-2b to hydroxyurea in Polycythemia vera patients
Heinz Gisslinger • et al. American Society Hematology ASH Annual Meeting 2016, oral presentation

Molecular responses and chromosomal aberrations in patients with polycythemia vera treated with peg-proline-interferon alpha-2b

ANAGRELIDE RETARD

A phase II randomized, multicenter, double blind, active controlled trial to compare the efficacy and safety of two different anagrelide formulations in patients with Essential Thrombocythemia - the TEAM ET 2.0 trial
Heinz Gisslinger • et al. British Journal of Haematology, 2019

Pharmacokinetics of a novel, Anagrelide extended-release formulation delivered with different food intake in healthy subjects analyzed by a randomized, 3-way crossover trial
Petrus E. Petrides • et al. Clinical Pharmacology in Drug Development, 7(2):129-131, 2018

Final results from the Phase 3 trial ARETA comparing a novel, extended-release anagrelide formulation to placebo in Essential Thrombocythemia patients with defined risk status
Heinz Gisslinger • et al. American Society Hematology ASH Annual Meeting 2016, oral presentation

Pharmacokinetics and -dynamics of low, intermediate and high dose landiolol and esmolol during long term infusion in healthy Caucasians
Günther Krumpl • et al. J Cardiovasc Pharmacol. 71(3): 137-146, 2018

Pharmacodynamic and Kinetic Behavior of Low-, Intermediate- and High-Dose Landiolol During Long-Term Infusion in Whites

Bolus application of landiolol and esmolol: comparison of the pharmacokinetic and pharmacodynamic profiles in a healthy Caucasian group.

Pharmacokinetics and pharmacodynamics of two different landiolol formulations in a healthy Caucasian group.

MARKETS AND LOCATIONS

The Vienna-based company has been expanding with increasing success. Today AOP Orphan operates in all seven continents. The rare diseases specialist has branch offices situated in its core markets within Europe and the Middle East. The international markets are handled and operated by long-term, close partners of AOP Orphan.

AOP ORPHAN GLOBAL PRESENCE

AOP ORPHAN LOCAL OFFICES

Austria
Bulgaria
Czech Republic
France
Germany
Hungary
Latvia, Lithuania and Estonia
Poland
Austria
Australia
Bosnia and Herzegovina
Canada
Central America
Croatia
Egypt
Greece
Hong Kong
Indonesia

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United Arab Emirates
United Kingdom

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Kazakhstan
Kuwait
Lebanon
Macedonia
Malaysia
Oman
Philippines
Portugal
Qatar
Russia
Saudi Arabia
Serbia
Singapore
Slovenia
South Africa
South America
Switzerland
Thailand
Turkey
Vietnam
PARTNERING
AOP Orphan researches, develops, produces and distributes innovative drugs and therapeutic solutions. At the same time, partnerships are very important – both in the field of research and commercialization.

RESEARCH PARTNER
AOP Orphan is deeply involved in research and development activities and can therefore be a highly competent partner for other companies. A well-staffed research department, broad detailed knowledge and close ties to study centers are of particular value here. As a fully integrated pharmaceutical company, AOP Orphan conducts phase I to phase IV clinical trials. Good examples are studies in hematooncology in the indications Essential thrombocythemia and Polycythæmia Vera (ANAHYDRET, ARETA, TEAM-ET, PEGINVERA and PROUD-PV), cardiovascular diseases in the indications septic shock & persistent tachycardia, as well as supraventricular tachycardia in pediatric patients (LANDI-SEP and LANDI-PED) and in neurology in Parkinson disease (NMSNabStudy).

MARKET PARTNER
AOP Orphan knows about the intricacies of doing business in the markets of Europe and the Middle East. Mentalities, cultures, healthcare systems and, above all, legal frameworks are so different that a superficial knowledge of the market is not enough. This is why AOP Orphan is present in each of its core markets with its own employees in order to meet these challenges properly. These include cultural understanding, marketing know-how, market access know-how, compliance and specific knowledge in the field of health technology assessment.

IN-LICENSING AND OUT-LICENSING
For AOP Orphan, partnerships can take two forms – as a partner for pharmaceutical companies looking to place their product in AOP Orphan’s core markets (in-licensing) and as a licensor for in-house developments that will be distributed by partners in other countries (out-licensing). In both cases, a trusting collaboration is based on having equal footing as well as demonstrating seriousness, expertise and passion for the matter at hand. Partnerships concentrate essentially on the key treatment areas of Cardiology and Pulmonology, HematoOncology, Neurology and Metabolic Disorders. In addition to this, AOP Orphan is also open to other treatment areas in the field of rare diseases as well as for special products.

The complexity of the treatment areas requires long-term cooperation with all stakeholders in the healthcare system. For this reason, partnerships are usually designed to continue for an extended period of time within the product life cycle.

For AOP Orphan, in-licensing means obtaining exclusive marketing rights for a product in a specific region – preferably in the core markets of the United Kingdom, Austria, France, Germany, Switzerland, the Baltic states, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Bosnia-Herzegovina, Romania, Bulgaria, Turkey, Scandinavia and the Middle East. In addition to these markets, AOP Orphan is also active in Belarus, Ukraine, Russia and Kazakhstan.

Within the framework of out-licensing, AOP Orphan issues marketing rights for products developed in-house. This relates particularly to regions where AOP Orphan does not pursue any commercial activities with its own employees. Such regions mainly include North and South America, Africa, South-East Asia, Australia and Russia.

Agnes Kohl, MPharmSc
Head of Business Development
“Finding solutions for apparently impossible tasks, always focusing on the patients with a deep appreciation of their disease experience makes AOP Orphan a unique partner.”