



## Current Agreements

### Dealdoc

#### **Collaborative R&D licensing and option agreement for disease altering therapies in oncology (extended)**

Celgene

Agios Pharmaceuticals

Apr 15 2010

# Collaborative R&D licensing and option agreement for disease altering therapies in oncology (extended)

Companies:	<a href="#">Celgene</a> <a href="#">Agiros Pharmaceuticals</a>
Announcement date:	Apr 15 2010
Amendment date:	May 18 2015
Deal value, US\$m:	351.7 : sum of upfront, milestone and equity payments
Related contracts:	<a href="#">Licensing agreement for AG-221</a> <a href="#">Collaboration agreement for metabolic immuno-oncology</a>

- [Details](#)
- [Financials](#)
- [Termsheet](#)
- [Press Release](#)
- [Filing Data](#)
- [Contract](#)

## Details

Announcement date:	Apr 15 2010
Amendment date:	May 18 2015
Expiry date:	Apr 14 2016
Industry sectors:	Bigbiotech Bigpharma Biotech Pharmaceutical
Compound name:	AG-120, AG-221, AG-120
Exclusivity:	Exclusive
Asset type:	Compound Technology Metabolic
Therapy areas:	Oncology Oncology » Leukemia » Acute myelogenous leukemia Assays Discovery tools Enabling technology
Technology types:	Genomics Precision medicine Screening Small molecules Collaborative R&D
Deal components:	Licensing Option
Stages of development:	Phase I
Geographic focus:	Worldwide North America » United States

## Financials

Deal value, US\$m:	351.7 : sum of upfront, milestone and equity payments
--------------------	---

<b>Upfront, US\$m:</b>	130.0 : upfront payment 20.0 : additional payment to extend agreement on Oct. 2011 20 : additional payment to extend agreement on Dec. 2013 20 : additional agreement to extend agreement
<b>Milestones, US\$m:</b>	120 : payments dependent on completing regulatory, clinical and commercial milestones
<b>Royalty rates, %:</b>	25 : upon dosing of the final human subject in a phase II study n/d : royalties on sales
<b>Equity, US\$m:</b>	8 : equity investment in Agios Series B Convertible Preferred Stock 28.7 : investment in Agios series C-2 Convertible Preferred Stock

## Termsheet

May 2016

The two companies also rewrote a 2010 collaboration deal.

Celgene has returned Agios' AG-120.

Also, the rights to two cancer metabolism programs that were discovered under that agreement, including one focused on MTAP (methylthioadenosine phosphorylase) deleted cancers, will move forward under the new research collaboration.

---

January 2015

Agios Pharmaceuticals (AGIO) Announces That Celgene (CELG) Has Agreed To Exercise Its Option To License AG-120 Under Global Strategic Collaboration

CAMBRIDGE, Mass., Jan. 12, 2015 (GLOBE NEWSWIRE) -- Agios Pharmaceuticals, Inc. (Nasdaq:AGIO), a leader in the fields of cancer metabolism and rare genetic disorders of metabolism, today announced that its collaboration partner Celgene Corporation has agreed that it will exercise its option to obtain an exclusive license outside the United States for AG-120, a first-in-class, oral, potent inhibitor of the mutant IDH1 protein under the terms of the 2010 collaboration agreement. This would be the second IDH mutant inhibitor to be licensed by Celgene in less than a year. AG-120 is currently being evaluated in two Phase 1 dose escalation trials, one in advanced hematologic malignancies and the other in advanced solid tumors. Both trials are evaluating AG-120 in patients whose cancer harbors an IDH1 mutation. The first data from the AG-120 program were presented at the EORTC-NCI-AACR Symposium on November 19, 2014 in advanced hematologic malignancies. Agios expects to report the first data from the Phase 1 advanced solid tumor trial at a medical conference in 2015. Celgene's exercise of the option is subject to receipt of any required regulatory approvals including any applicable clearance under the Hart-Scott-Rodino Act. Agios is webcasting its corporate presentation from the 33rd Annual J.P. Morgan Healthcare Conference today at 2:30 p.m. PST (5:30 p.m. EST). The presentation will be followed by a webcast of its question and answer session at 3:00 p.m. PST (6:00 p.m. EST).

"Celgene's continued support of our investigational cancer medicines is of great importance to us, and we are pleased that they have agreed to license ex-U.S. rights to AG-120 while we retain full U.S. development and commercialization rights," said David Schenkein, M.D., chief executive officer of Agios. "We believe their decision demonstrates the potential opportunity of AG-120 and continues to validate our cancer metabolism platform and precision medicine approach to drug development. The combined development and commercial expertise of Agios and Celgene would allow us to expedite development of AG-120, and make this medicine available as soon as possible to patients globally."

"Licensing AG-120 would strengthen our collaboration with Agios and our commitment to innovative therapeutics in cancer metabolism," said Thomas Daniel, M.D., president of research & early development at Celgene. "The progress with AG-120 reinforces the value of Celgene's collaboration strategy with early stage companies pursuing potentially disruptive therapeutic research in emerging high potential areas."

Agios and Celgene entered into a global strategic collaboration in April 2010 to develop new therapeutics targeting cancer metabolism. By exercising its exclusive option under the terms of the agreement, Celgene would lead development and commercialization outside the United States for AG-120, and Agios and Celgene would equally fund the global development costs of AG-120 that are not specific to any particular region or country. Celgene would be responsible for development and commercialization costs specific to countries outside the United States, and Agios would be responsible for development and commercialization costs specific to the United States. Celgene would be eligible to receive royalties on any net sales in the U.S. Agios would be eligible to receive royalties on any net sales outside the U.S. and up to \$120 million in payments on achievement of certain milestones.

About Agios Pharmaceuticals, Inc.

Agios Pharmaceuticals is focused on discovering and developing novel investigational medicines to treat cancer and rare genetic disorders of metabolism through scientific leadership in the field of cellular metabolism. In addition to an active research and discovery pipeline across both therapeutic areas, Agios has multiple first-in-class investigational medicines in clinical and/or preclinical development. All Agios programs focus on genetically identified patient populations, leveraging our knowledge of metabolism, biology and genomics. For more information, please visit the company's website at [agios.com](http://agios.com).

---

8 December 2014

Agios Pharmaceuticals announced that Celgene Corporation has elected to extend the period of its exclusivity for an additional year to April 2016 under the global strategic collaboration agreement.

The extension marks the final year for the discovery phase as outlined under the terms of the collaboration, which gives Celgene an exclusive option to drug candidates generated by Agios' cancer metabolism platform during this time.

The terms of the collaboration extension are consistent with previously agreed upon financial terms.

As a result of the extension, Celgene will maintain its exclusive option to drug candidates that emerge from Agios' cancer metabolism research platform through April 2016.

Agios will receive a \$20 million payment.

Following this extension, the discovery portion of the collaboration will expire on April 14, 2016.

---

13 June 2014

Agios Pharmaceuticals announced that its partner Celgene has exercised its option to an exclusive worldwide license to AG-221, an oral, first-in-class, potent inhibitor of the mutant IDH2 protein.

The option to license extended to Celgene through the end of Phase 1, but AG-221 has been exercised early based on the Phase 1 data generated to date.

AG-221 is currently in a Phase 1 dose escalation study in patients that harbor an IDH2 mutation with advanced hematologic malignancies, including acute myeloid leukemia.

---

03 February 2014

Agios Pharmaceuticals has elected to retain the United States development and commercial rights to the isocitrate dehydrogenase 1 (IDH1) program including the clinical candidate AG-120, in accordance with the terms of its global strategic collaboration with Celgene Corporation in the field of cancer metabolism.

By exercising Agios' option to U.S. rights for the IDH1 program, Agios will lead development and commercialization activities for AG-120 in the U.S., and Celgene retains the option to lead development and commercialization activities for AG-120 in the rest of the world.

AG-120 is an orally available, selective, potent inhibitor of the mutated IDH1 protein and a highly targeted first-in-class therapeutic candidate for the treatment of patients with cancers that harbor an IDH1 mutation.

Agios and Celgene are also collaborating on the development of AG-221, an oral, selective, potent inhibitor of the mutated IDH2 protein, making it the first targeted therapeutic candidate to treat patients with cancers that harbor an IDH2 mutation.

---

11 December 2013

Agios Pharmaceutical announced an extension of one additional year to the period of exclusivity for their strategic cancer metabolism collaboration with Celgene.

Celgene will maintain its exclusive option to all drug candidates emerging from Agios' cancer metabolism research platform through April 2015.

Agios will receive a \$20 million payment.

Celgene has the ability to further extend this collaboration period for one additional year for an additional payment.

---

5 October 2011

Celgene and Agios have agreed, ahead of schedule, to extend the initial period of exclusivity of the companies' April 2010 collaboration agreement from three to four years.

During this period, Celgene has an exclusive option to drug candidates generated by Agios' cancer metabolism research platform.

Under the terms of the new agreement, Agios will now receive a \$20 million payment.

Celgene also has the ability to extend the exclusive collaboration period further in the future, for additional payments.

---

15 April 2010

Celgene and Agios Pharma have formed a global strategic collaboration focused on targeting cancer metabolism.

Agios will receive a \$130 million upfront payment, including an equity investment.

Celgene receives an initial period of exclusivity during which it has the option to develop any drugs resulting from the Agios cancer metabolism research platform.

Celgene may extend this exclusivity period through additional funding.

If successful, Agios would receive substantial regulatory, clinical and commercial milestones.

Agios may also participate in the development and commercialization of certain products in the US.

## Press Release

May 2016

Cambridge, Massachusetts-based Agios Pharmaceuticals (AGIO) inked a new global collaboration deal with Summit, New Jersey-based Celgene (CELG).

The two companies will collaborate on metabolic immuno-oncology, an offshoot from the hot field of immuno-oncology, where the immune system is programmed to attack cancer cells. In metabolic immuno-oncology, the immune system's metabolic rate is enhanced, which is to say, supercharged, to fight cancer.

As part of the deal, Celgene will pay Agios \$200 million upfront in cash, with various milestone payments possible. The collaboration deal is scheduled to last four years, and Agios can extend it for an additional two. Because the work is preclinical and competitive, specific targets have not been disclosed. All told, the deal has the potential to surpass \$1 billion.

"The immune system's ability to attack tumors is highly regulated by cellular metabolism," said Rob Hershberg, Celgene's chief scientific officer, in a statement. "This emerging discipline of metabolic immuno-oncology has great potential to provide novel insights and targets for cancer immunotherapy in solid and hematologic malignancies. This strategic agreement combines Agios' scientific leadership in cellular metabolism with Celgene's expertise and growing efforts in immuno-oncology, and builds upon the extremely productive partnership and working relationship that exists between our two companies."

The two companies also rewrote a 2010 collaboration deal. Celgene has returned Agios' AG-120. Also, the rights to two cancer metabolism programs that were discovered under that agreement, including one focused on MTAP (methylthioadenosine phosphorylase) deleted cancers, will move forward under the new research collaboration.

AG-120 is an experimental cancer compound, which is close to a Phase III trial for a subset of patients diagnosed with acute myeloid leukemia, a blood cancer. It is also being tested in other cancers.

As Xconomy points out, "Deserved or not, there is always a stigma attached to a drug that a large company sends back to a partner."

David Schenkein, Agios' chief executive officer, however, says it's just about "simplifying the relationship" between the two companies. They continue to share rights to several other drugs and have been successfully collaborating since 2010. "We've always said that if we were going to do a research partnership now, it would be focused on an area of research where we felt someone else's capabilities would allow us to really jumpstart into a new field," Schenkein says.

Agios is evaluating AG-120 in several clinical trials. One is as a sole agent in the relapsed/refractory setting, while others are in combination with standard chemotherapy treatments as frontline approaches. It is also planning pivotal trials in acute myeloid leukemia, as well as in several solid tumors, such as cholangiocarcinoma and glioma.

"We are excited to consolidate the full worldwide rights for AG-120, providing us with another wholly owned investigational therapy discovered by Agios scientists to develop and commercialize along with our rare genetic disorders programs," Schenkein said in a statement. "We know that people with AML have limited treatment options today, and we are committed to bringing AG-120 through pivotal development as quickly as possible."

Celgene, for its part, is best known for its drugs for myeloma, Revlimid, Pomalyst/Imnovid, and Thalomid. The company has, however, been edging into immuno-oncology through partnerships with Bluebird Bio (BLUE) and Juno Therapeutics (JUNO), where it has focused on CAR-T technology. Celgene is also working with AstraZeneca (AZN) on developing a checkpoint inhibitor, another component of immuno-oncology.

The Agios deal has a lot of moving parts. It starts with \$200 million upfront, but Celgene will have the option of picking up each program through Phase I dose escalation for a minimum of \$30 million. For the metabolic immuno-oncology programs, as part of a global co-development and co-commercialization agreement, they will split costs and Agios is eligible for up to \$169 million in clinical and regulatory milestone payments for each program.

Celgene also has the chance to choose a metabolic immuno-oncology program where it will share costs and profits 65/35, for which Agios could receive up to \$209 million in milestones. And for any inflammation or autoimmune programs that might develop from the research, Celgene has an option for global licensing, development and commercialization. Agios could receive up to \$385 million in various milestones, as well as double-digit tiered royalties on any net sales.

---

January 2015

#### Agios Pharmaceuticals (AGIO) Announces That Celgene (CELG) Has Agreed To Exercise Its Option To License AG-120 Under Global Strategic Collaboration

CAMBRIDGE, Mass., Jan. 12, 2015 (GLOBE NEWSWIRE) -- Agios Pharmaceuticals, Inc. (Nasdaq:AGIO), a leader in the fields of cancer metabolism and rare genetic disorders of metabolism, today announced that its collaboration partner Celgene Corporation has agreed that it will exercise its option to obtain an exclusive license outside the United States for AG-120, a first-in-class, oral, potent inhibitor of the mutant IDH1 protein under the terms of the 2010 collaboration agreement. This would be the second IDH mutant inhibitor to be licensed by Celgene in less than a year. AG-120 is currently being evaluated in two Phase 1 dose escalation trials, one in advanced hematologic malignancies and the other in advanced solid tumors. Both trials are evaluating AG-120 in patients whose cancer harbors an IDH1 mutation. The first data from the AG-120 program were presented at the EORTC-NCI-AACR Symposium on November 19, 2014 in advanced hematologic malignancies. Agios expects to report the first data from the Phase 1 advanced solid tumor trial at a medical conference in 2015. Celgene's exercise of the option is subject to receipt of any required regulatory approvals including any applicable clearance under the Hart-Scott-Rodino Act. Agios is webcasting its corporate presentation from the 33rd Annual J.P. Morgan Healthcare Conference today at 2:30 p.m. PST (5:30 p.m. EST). The presentation will be followed by a webcast of its question and answer session at 3:00 p.m. PST (6:00 p.m. EST).

"Celgene's continued support of our investigational cancer medicines is of great importance to us, and we are pleased that they have agreed to license ex-U.S. rights to AG-120 while we retain full U.S. development and commercialization rights," said David Schenkein, M.D., chief executive officer of Agios. "We believe their decision demonstrates the potential opportunity of AG-120 and continues to validate our cancer metabolism platform and precision medicine approach to drug development. The combined development and commercial expertise of Agios and Celgene would allow us to expedite development of AG-120, and make this medicine available as soon as possible to patients globally."

"Licensing AG-120 would strengthen our collaboration with Agios and our commitment to innovative therapeutics in cancer metabolism," said Thomas Daniel, M.D., president of research & early development at Celgene. "The progress with AG-120 reinforces the value of Celgene's collaboration strategy with early stage companies pursuing potentially disruptive therapeutic research in emerging high potential areas."

Agios and Celgene entered into a global strategic collaboration in April 2010 to develop new therapeutics targeting cancer metabolism. By exercising its exclusive option under the terms of the agreement, Celgene would lead development and commercialization outside the United States for AG-120, and Agios and Celgene would equally fund the global development costs of AG-120 that are not specific to any particular region or country. Celgene would be responsible for development and commercialization costs specific to countries outside the United States, and Agios would be responsible for development and commercialization costs specific to the United States. Celgene would be eligible to receive royalties on any net sales in the U.S. Agios would be eligible to receive royalties on any net sales outside the U.S. and up to \$120 million in payments on achievement of certain milestones.

About Agios Pharmaceuticals, Inc.

Agios Pharmaceuticals is focused on discovering and developing novel investigational medicines to treat cancer and rare genetic disorders of metabolism through scientific leadership in the field of cellular metabolism. In addition to an active research and discovery pipeline across both therapeutic areas, Agios has multiple first-in-class investigational medicines in clinical and/or preclinical development. All Agios programs focus on genetically identified patient populations, leveraging our knowledge of metabolism, biology and genomics. For more information, please visit the company's website at [agios.com](http://agios.com).

---

8 December 2014

#### Agios Pharmaceuticals (AGIO) Announces Celgene (CELG) Decision To Extend Discovery Phase Of Global Strategic Collaboration To April 2016

Agios Pharmaceuticals, Inc. (Nasdaq:AGIO), a leader in the fields of cancer metabolism and rare genetic disorders of metabolism, today announced that Celgene Corporation has elected to extend the period of its exclusivity for an additional year to April 2016 under the global strategic collaboration agreement. The two companies have been working together since April 2010 to discover, develop and commercialize disease-altering therapies in oncology arising from Agios' cancer metabolism research platform. The extension marks the final year for the discovery phase as outlined under the terms of the collaboration, which gives Celgene an exclusive option to drug candidates generated by

Agios' cancer metabolism platform during this time. The terms of the collaboration extension are consistent with previously agreed upon financial terms.

"Celgene continues to be a great partner in our effort to create a leading research and development company in the area of cancer metabolism," said David Schenkein, M.D., chief executive officer of Agios Pharmaceuticals. "We are pleased that Celgene has elected to extend our discovery collaboration and believe it reflects our shared commitment to creating transformative new medicines for patients with cancer. In addition to this final year of the discovery collaboration, the development collaboration continues to mature in stage and scope with the advancement of AG-221, our IDH2 mutant inhibitor, and AG-120, our IDH1 mutant inhibitor, through Phase 1 studies in advanced hematologic malignancies and solid tumors."

"Agios has advanced the field of cancer metabolism with their novel IDH1 and IDH2 programs, demonstrating significant therapeutic potential for patients with selected mutations in these targets," said Thomas Daniel, M.D., president of research for Celgene. "We look forward to extending our collaboration to discover and develop additional novel drugs in our cancer metabolism collaboration."

As a result of the extension, Celgene will maintain its exclusive option to drug candidates that emerge from Agios' cancer metabolism research platform through April 2016. Agios will receive a \$20 million payment. Following this extension, the discovery portion of the collaboration will expire on April 14, 2016. Under the terms of the original agreement announced in April 2010, Agios leads research, preclinical and early development efforts through Phase 1, while Celgene receives an option to obtain exclusive rights either upon IND acceptance or at the end of Phase 1, to further development and commercialize medicines emerging from Agios' cancer metabolism research. Celgene would lead and fund global development and commercialization of some of these drugs, and Agios would retain development and commercialization rights for certain drugs in the United States. On all programs, Agios is eligible to receive up to \$120 million in milestone-based payments as well as royalties on any sales.

AG-221 and AG-120 are two drug candidates that have been nominated to date during the discovery phase of the collaboration. In June 2014, Celgene exercised its exclusive option to license AG-221 and gained worldwide development and commercialization rights for AG-221. Agios continues to conduct early clinical development activities within the AG-221 development program. The companies are also collaborating on the development of AG-120, which is being studied in two Phase 1 trials in patients whose hematologic malignancies and solid tumors carry an IDH1 mutation. Agios retains U.S. development and commercialization rights for AG-120, and Celgene has an exclusive option to the ex-U.S. rights.

About Agios Pharmaceuticals, Inc.

Agios Pharmaceuticals is focused on discovering and developing novel investigational medicines to treat cancer and rare genetic disorders of metabolism through scientific leadership in the field of cellular metabolism. In addition to an active research and discovery pipeline across both therapeutic areas, Agios has multiple first-in-class investigational medicines in clinical and/or preclinical development. All Agios programs focus on genetically identified patient populations, leveraging our knowledge of metabolism, biology and genomics.

---

13 June 2014

Celgene Corporation (CELG) Grabs Rights To Agios Pharmaceuticals (AGIO)' Lead Cancer Drug

Agios Pharmaceuticals Announces that Celgene Exercised its Option to License AG-221 Under Global Strategic Collaboration

Major Milestone in Landmark Collaboration Between Agios and Celgene

CAMBRIDGE, Mass., Jun 13, 2014 (BUSINESS WIRE) -- Agios Pharmaceuticals, Inc. AGIO +8.79% , a leader in the fields of cancer metabolism and inborn errors of metabolism (IEMs), today announced that its partner Celgene Corporation has exercised its option to an exclusive worldwide license to AG-221, an oral, first-in-class, potent inhibitor of the mutant IDH2 protein. Under the terms of the agreement, the option to license extended to Celgene through the end of Phase 1, but AG-221 has been exercised early based on the Phase 1 data generated to date. AG-221 is currently in a Phase 1 dose escalation study in patients that harbor an IDH2 mutation with advanced hematologic malignancies, including acute myeloid leukemia (AML).

"We are pleased with Celgene's decision to license AG-221, as we believe it reflects the strength of our progress with this product candidate and underscores Agios' and Celgene's commitment to precision medicine," said David Schenkein, M.D., chief executive officer of Agios. "Celgene brings global reach, significant expertise and financial resources to the AG-221 program, and we look forward to our continued collaboration to increase the scope and efforts directed to IDH2 and broadly advance this important potential cancer medicine."

"Agios' AG-221 candidate is simultaneously advancing convergent fields, including cancer metabolism, epigenetics and precision medicine. The emerging Phase 1 clinical data validate the preclinical and mechanistic work on IDH2 mutations in AML, and most importantly, advance a highly promising drug candidate for treatment of molecularly selected patients," said Thomas Daniel, M.D., president of research & early development at Celgene. "Celgene looks forward to deploying our worldwide development capabilities in hematological malignancies and to working with Agios to accelerate development."

Agios and Celgene entered into a global strategic collaboration in April 2010 to develop new therapeutics targeting cancer metabolism. By exercising its exclusive option under the terms of the agreement, Celgene gains worldwide development and commercialization rights for

AG-221. Agios, in addition to contributing its scientific and translational expertise, will continue to conduct early clinical development and regulatory activities within the AG-221 development program in collaboration with Celgene. Celgene is responsible for all development costs for AG-221. Agios is eligible for up to \$120 million in milestone payments and a tiered royalty on any net sales. Agios also has the right to conduct a portion of any commercialization activities for AG-221 in the United States.

AG-221 is part of Agios' IDH portfolio that also includes the IDH1 mutant inhibitor AG-120, which the company continues to develop and is in Phase 1 clinical trials in advanced solid tumors and hematologic malignancies. Agios retains U.S. rights to the IDH1 program, and Celgene has an exclusive option to ex-U.S. rights for the program. Agios continues to advance its discovery and research of cancer metabolism targets.

#### About IDH Mutations and Cancer

IDH1 and IDH2 are two metabolic enzymes that are mutated in a wide range of hematologic and solid tumor malignancies. The prevalence of IDH is expected to evolve as genomic analysis of tumors increase. Agios' research revealed the potential of IDH1 and IDH2 mutations as novel therapeutic targets in cancer, which may lead to clinical benefit for the subset of cancer patients whose tumors carry them. Patients carry either an IDH1 or IDH2 mutation, but not both.

Agios is developing two oral, first-in-class IDH mutant inhibitors: AG-221 is an IDH2 mutant inhibitor, and AG-120 is an IDH1 mutant inhibitor. AG-221 is currently being evaluated in a Phase 1 dose-escalation study in patients with advanced hematologic malignancies, including AML, one of the most common types of leukemia in adults. AG-120 is currently being evaluated in two Phase 1 trials, one in hematologic malignancies and another in solid tumors. Both compounds were discovered and developed in the laboratory of Agios.

#### About Cancer Metabolism

Cancer metabolism is a new and exciting field of biology that provides a novel approach to treating cancer. Cancer cell metabolism is marked by profound changes in nutrient requirements and usage to ensure cell proliferation and survival. Research in the field has demonstrated that cancer cells become addicted to certain fuel sources and metabolic pathways. In cancer, this metabolic reprogramming is coordinated with proliferative signaling and regulated by the same oncogenes and tumor suppressor genes to ensure efficient proliferation. Glycolysis (sugar metabolism), fatty acid metabolism and autophagy (self metabolism) are three pathways shown to play a critical role in cancer metabolism. Identifying and disrupting certain enzymes in these, and perhaps other, metabolic pathways provides a powerful intervention point for discovery and development of cancer therapeutics.

#### About Agios Pharmaceuticals, Inc.

Agios Pharmaceuticals is focused on discovering and developing novel drugs to treat cancer and inborn errors of metabolism, or IEMs, which are rare genetic metabolic diseases, through scientific leadership in the field of cellular metabolism. In addition to an active research and discovery pipeline across both therapeutic areas, Agios has multiple first-in-class lead product candidates in cancer metabolism and IEMs in clinical and/or preclinical development. All Agios programs focus on genetically identified patient populations, leveraging our knowledge of metabolism, biology and genomics. For more information, please visit our website at [www.agios.com](http://www.agios.com).

---

03 February 2014

#### Agios Pharmaceuticals Exercises Option to U.S. Development and Commercialization Rights for IDH1 Program under Celgene Collaboration

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Agios Pharmaceuticals, Inc. (NASDAQ:AGIO), a leader in the fields of cancer metabolism and inborn errors of metabolism, announced today that it has elected to retain the United States development and commercial rights to the isocitrate dehydrogenase 1 (IDH1) program including the clinical candidate AG-120, in accordance with the terms of its global strategic collaboration with Celgene Corporation in the field of cancer metabolism.

"Celgene has been an exceptional partner for our cancer metabolism research efforts, and we are looking forward to the next phase of our collaboration with the global clinical development of the IDH2 and IDH1 programs."

"The opportunity to develop and commercialize the IDH1 program in the U.S. market is a critical component of Agios' long term strategy and vision to transform the lives of patients with cancer," said David Schenkein, M.D., chief executive officer of Agios. "Celgene has been an exceptional partner for our cancer metabolism research efforts, and we are looking forward to the next phase of our collaboration with the global clinical development of the IDH2 and IDH1 programs."

By exercising Agios' option to U.S. rights for the IDH1 program, Agios will lead development and commercialization activities for AG-120 in the U.S., and Celgene retains the option to lead development and commercialization activities for AG-120 in the rest of the world. AG-120 is an orally available, selective, potent inhibitor of the mutated IDH1 protein and a highly targeted first-in-class therapeutic candidate for the treatment of patients with cancers that harbor an IDH1 mutation.

Agios and Celgene are also collaborating on the development of AG-221, an oral, selective, potent inhibitor of the mutated IDH2 protein, making it the first targeted therapeutic candidate to treat patients with cancers that harbor an IDH2 mutation.

#### About IDH Mutations and Cancer



The connection between cancer and metabolism has been the central focus of scientists at Agios, who were the first to identify the neo-activity of IDH1 mutations to produce the oncometabolite 2-HG in research published in Nature in 2009. These insights revealed the potential of IDH1 and IDH2 mutations as novel therapeutic targets in cancer. Mutations in both IDH1 and IDH2 have been linked to numerous hematologic and solid tumor malignancies.

Agios and its collaborators recently demonstrated that IDH1 and IDH2 mutations initiate and drive cancer growth by blocking differentiation, also referred to as maturation, of primitive cells. Agios believes that inhibition of these mutated proteins may lead to clinical benefit for the subset of cancer patients whose tumors carry these mutations.

About Agios Pharmaceuticals, Inc.

Agios Pharmaceuticals is focused on discovering and developing novel drugs to treat cancer and inborn errors of metabolism, or IEMs, which are rare genetic metabolic diseases, through scientific leadership in the field of cellular metabolism. In addition to an active research and discovery pipeline across both therapeutic areas, Agios has multiple first-in-class lead product candidates in cancer metabolism and IEMs in clinical and/or preclinical development. All Agios programs focus on genetically identified patient populations, leveraging our knowledge of metabolism, biology and genomics. For more information, please visit our website at [www.agios.com](http://www.agios.com).

---

11 December 2013

Agios Advances Cancer Metabolism Collaboration with Celgene

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Agios Pharmaceuticals, Inc. (NASDAQ: AGIO), a leader in the fields of cancer metabolism and inborn errors of metabolism, today announced an extension of one additional year to the period of exclusivity for their strategic cancer metabolism collaboration with Celgene Corporation (NASDAQ: CELG).

"The quality of the scientific interaction and collaboration with Agios has been outstanding" "The quality of the scientific interaction and collaboration with Agios has been outstanding," said Thomas Daniel, M.D., president of research for Celgene. "We are pleased that while AG-221 and AG-120 are advancing into clinical development, significant progress is also being made on new targets in cancer metabolism. We are delighted to extend our collaboration, building upon the unique synergies and a shared mission to help cancer patients live longer and better lives."

As a result of the extension, Celgene will maintain its exclusive option to all drug candidates emerging from Agios' cancer metabolism research platform through April 2015. Under the terms of the agreement, Agios will receive a \$20 million payment. Celgene has the ability to further extend this collaboration period for one additional year for an additional payment.

"Celgene has been a tremendous partner, and we are thrilled to continue our partnership with them seeking to establish the leading research and development effort in the field of cancer metabolism," said David Schenkein, M.D., chief executive officer of Agios. "We believe that Agios' unique approach to cancer metabolism, based on deep science, has the potential to fundamentally change the lives of cancer patients."

Under the terms of the original agreement announced in April 2010, Agios received a \$130 million upfront payment, including an equity investment that comprised the company's Series B financing round. Agios leads research and early development efforts through Phase 1, while Celgene receives an option to obtain exclusive rights either upon IND acceptance or at the end of Phase 1, to further develop and commercialize drugs emerging from Agios' cancer metabolism research. Celgene would lead and fund global development and commercialization of some of these drugs, and Agios would retain development and commercialization rights for certain drugs in the United States. On all programs, Agios has the right to receive up to \$120 million in milestone-based payments as well as royalties on any sales.

In October 2011, Celgene and Agios agreed, ahead of schedule, to extend the discovery phase of their strategic collaboration targeting cancer metabolism, extending the initial period of exclusivity from three years to four years.

About Agios Pharmaceuticals, Inc.

Agios Pharmaceuticals is focused on discovering and developing novel drugs to treat cancer and inborn errors of metabolism, or IEMs, which are rare genetic metabolic diseases, through scientific leadership in the field of cellular metabolism. In addition to an active research and discovery pipeline across both therapeutic areas, Agios has multiple first-in-class lead product candidates in cancer metabolism and IEMs in clinical and/or preclinical development. All Agios programs focus on genetically identified patient populations, leveraging our knowledge of metabolism, biology and genomics. For more information, please visit our website at [www.agios.com](http://www.agios.com).

---

5 October 2011

Celgene Corporation (CELG) Pays \$20 Million to Extend Agios Pharmaceuticals Agreement

CAMBRIDGE, Mass.--(BUSINESS WIRE)-- Agios Pharmaceuticals, the leading biopharmaceutical company focused on discovering and developing novel drugs in the rapidly emerging field of cancer metabolism, today announced that Celgene Corporation (NASDAQ:CELG - News) and Agios have agreed, ahead of schedule, to extend the initial period of exclusivity of the companies' April 2010 collaboration agreement from

three to four years. During this period, Celgene has an exclusive option to drug candidates generated by Agios' cancer metabolism research platform. Under the terms of the new agreement, Agios will now receive a \$20 million payment. Celgene also has the ability to extend the exclusive collaboration period further in the future, for additional payments.

"In the first 18 months of our collaboration, we have made significant progress and have been extremely impressed by the caliber of the team, the science, and the unique research capabilities that Agios brings to this alliance," said Thomas Daniel, M.D., president of research for Celgene. "As this early extension decision demonstrates, we are enthusiastic about the potential of Agios' industry-leading approach targeting cancer metabolism to drive the development of multiple innovative, first-in-class cancer therapies."

Under the terms of the original agreement announced in April 2010, Agios received a \$130 million upfront payment, including an equity investment. Agios leads discovery and early translational development for all cancer metabolism programs, while Celgene has an exclusive option to license any resulting clinical candidates at the end of Phase I, and will lead and fund global development and commercialization of some of the licensed programs. Agios retains development and commercialization rights for certain products in the United States. On all programs, Agios may receive up to \$120 million in milestones as well as royalties on sales.

"Celgene's decision to extend our collaboration much earlier than required demonstrates their dedication to our partnership and to the promise of the field of cancer metabolism generally," said David Schenkein, M.D., chief executive officer of Agios. "This alliance has enabled Agios to identify and advance a broad portfolio of cancer metabolism discovery programs. We have an extremely productive relationship with Celgene, whose team shares our deep commitment to the potential of cancer metabolism to transform patient outcomes."

#### About Cancer Metabolism

Cancer metabolism is a new and exciting field of biology that provides a novel approach to treating cancer. Cancer cell metabolism is marked by profound changes in nutrient requirements and usage to ensure cell proliferation and survival. Research in the field has demonstrated that cancer cells become addicted to certain fuel sources and metabolic pathways. In cancer, this metabolic reprogramming is coordinated with proliferative signaling and regulated by the same oncogenes and tumor suppressor genes to ensure efficient proliferation. Glycolysis (sugar metabolism), fatty acid metabolism and autophagy (self metabolism) are three pathways shown to play a critical role in cancer metabolism. Identifying and disrupting certain enzymes in these, and perhaps other, metabolic pathways provides a powerful intervention point for discovery and development of cancer therapeutics.

#### About Agios Pharmaceuticals

Agios Pharmaceuticals is the first biopharmaceutical company dedicated to the discovery and development of novel therapeutics in the emerging field of cancer metabolism. To support and drive these efforts, Agios has built a robust platform integrating cancer biology, metabolomics, biochemistry and informatics to enable target and biomarker identification. Agios' capabilities to interrogate differential cellular metabolism of diseased cells relative to normal cells may also be applicable to other therapeutics areas including autoimmune, inflammatory and neurological diseases. The company's founders represent the core thought leaders in the field of cancer metabolism, responsible for key advances, insights and discoveries in the field. Agios Pharmaceuticals is located in Cambridge, Massachusetts. For more information, please visit the company's website at [www.agios.com](http://www.agios.com).

---

15 April 2010

Celgene (CELG) and Agios Pharmaceuticals Announce Global Strategic Collaboration to Advance Unique Science of Cancer Metabolism; Agios Will Receive \$130 Million Upfront 4/15/2010

SUMMIT, N.J. & CAMBRIDGE, Mass.--(BUSINESS WIRE)--Celgene Corporation and Agios Pharmaceuticals Inc., a privately-held biotechnology company, today announced the formation of a global strategic collaboration focused on targeting cancer metabolism. The goal of the collaboration is to discover, develop, and deliver novel disease-altering therapies in oncology based on the transformational science of Agios' innovative cancer metabolism research platform. This platform is based on the concept that targeting key metabolic enzymes unique to rapidly proliferating cancer cells can "starve" the cancer.

Under the terms of the agreement, Agios will receive a \$130 million upfront payment, including an equity investment. In return, Celgene receives an initial period of exclusivity during which it has the option to develop any drugs resulting from the Agios cancer metabolism research platform. In addition, Celgene may extend this exclusivity period through additional funding. If successful, Agios would receive substantial regulatory, clinical and commercial milestones.

"Agios' approach is unique and groundbreaking. We look for early opportunities in the IDH1 and PKM2 programs and see exceptional value in new targets Agios is uniquely positioned to prosecute," said Thomas Daniel, M.D., President of Research for Celgene. "We believe the strategic alliance with Agios can expand our deep and diverse pipeline of innovative programs focused on changing treatment paradigms in serious and debilitating diseases."

Agios will lead discovery and early translational development for all cancer metabolism programs. Celgene has an exclusive option to license any resulting clinical candidates at the end of Phase I, and will lead and fund global development and commercialization of licensed programs. On each program, Agios may receive up to \$120 million in milestones as well as royalties on sales, and may also participate in the development

and commercialization of certain products in the US.

"We are thrilled to establish this alliance with Celgene, a pre-eminent global biopharmaceutical company, that shares our passion and commitment to discovering breakthrough medicines that may improve the lives of cancer patients worldwide," said David Schenkein, M.D., Chief Executive Officer of Agios. "This transformational alliance provides Agios with the long-term resources and flexibility to extend our leadership position in the cancer metabolism field and to advance our capabilities and programs as an integrated, independent company."

#### About Cancer Metabolism

Cancer metabolism is a new and exciting field of biology that provides an innovative approach to treating cancer. Cancer cell metabolism is marked by profound changes in nutrient requirements and usage to ensure cell proliferation and survival. Research in the field has demonstrated that cancer cells become addicted to certain fuel sources and metabolic pathways. Identifying and disrupting certain enzymes in these metabolic pathways provides a powerful intervention point for discovery and development of cancer therapeutics.

#### About Agios Pharmaceuticals

Agios Pharmaceuticals, a private, independent biopharmaceutical company, is dedicated to the discovery and development of novel therapeutics in the emerging field of cancer metabolism. To support and drive these efforts, Agios has built a robust platform integrating biology, metabolomics, biochemistry and informatics to enable target and biomarker identification.

To date, Agios has put in place a world-class scientific team, built the largest research laboratory dedicated to cancer metabolism and created an emerging compound development pipeline of novel cancer therapeutics. The Company's founders and scientific advisors represent the core thought leaders in the field of cancer metabolism, responsible for key advances, insights and discoveries in the field. Agios Pharmaceuticals is located in Cambridge, Massachusetts. The company is financed by Third Rock, Flagship, ARCH Venture Partners. For more information, please visit the company's website at [www.agios.com](http://www.agios.com).

#### About Celgene

Celgene Corporation is an integrated global biopharmaceutical company engaged primarily in the discovery, development and commercialization of innovative therapies for the treatment of cancer and inflammatory diseases through gene and protein regulation. For more information, please visit the Company's website at [www.celgene.com](http://www.celgene.com).

### Filing Data

#### 10K abstract - 2012

On April 14, 2010, we entered into a discovery and development collaboration and license agreement with Agios Pharmaceuticals, Inc., or Agios, which focuses on cancer metabolism targets and the discovery, development and commercialization of associated therapeutics. As part of the agreement, as amended, we paid Agios \$121.2 million, which was recorded by us as research and development expense. We also made an \$8.8 million equity investment in Agios Series B Convertible Preferred Stock. In October 2011, we made a \$20.0 million payment to Agios for a one year extension of our oncology collaboration and licensing agreement and in November 2011, made a \$28.7 million investment in Agios series C-2 Convertible Preferred Stock. With respect to each product in a program that we choose to license, Agios could receive up to \$120.0 million upon achievement of certain milestones plus royalties on sales, and Agios may also participate in the development and commercialization of certain products in the United States. Agios may also receive a one-time milestone payment of \$25.0 million upon dosing of the final human subject in a phase II study, such payment to be made only once with respect to only one program. Our option will terminate on April 14, 2014.

We have determined that Agios is a variable interest entity; however, we are not the primary beneficiary of Agios. Although we would have the right to receive the benefits from the collaboration and license agreement, we do not have the power to direct the activities under the collaboration and license agreement as Agios has the decision-making authority for the Joint Steering Committee and Joint Research Committee until we exercise our option to license a product. Our interest in Agios is limited to our equity ownership and we do not have any obligations or rights to the future losses or returns of Agios beyond this ownership.

### Contract

*Not available.*