UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): December 5, 2020

ImmunoGen, Inc.

(Exact name of registrant as specified in its charter)

Massachusetts (State or other jurisdiction of incorporation) **0-17999** (Commission File Number)

04-2726691 (IRS Employer Identification No.)

830 Winter Street, Waltham, MA 02451 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (781) 895-0600

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

 \Box Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Common Stock, \$.01 par value	IMGN	Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company \Box

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box

Item 7.01 - Regulation FD Disclosure.

As previously announced, ImmunoGen, Inc. (the "Company") will host an investor conference call on December 7, 2020 at 8:00 a.m., ET, to discuss recent updates for IMGN632 in blastic plasmacytoid dendritic cell neoplasm ("BPDCN") and acute myeloid leukemia. A copy of the investor presentation to be used on the investor conference call is being furnished with this Current Report on Form 8-K as Exhibit 99.2.

Item 8.01 - Other Events.

On December 5, 2020, the Company issued a press release relating to safety and efficacy findings from the expansion phase of the Company's Phase 1/2 clinical trial of IMGN632 in patients with relapsed/refractory BPDCN that were presented during an oral session at the 62nd American Society of Hematology (ASH) Annual Meeting on December 5, 2020. A copy of the press release is being filed with this Current Report on Form 8-K as Exhibit 99.1 and is incorporated herein by reference.

In addition, the U.S. Food and Drug Administration (FDA) advised the Company to add a pivotal cohort of up to 20 newly-diagnosed patients to the Company's ongoing Phase 1/2 clinical trial of IMGN632 in relapsed/refractory BPDCN to support a potential label that could cover all BPDCN patients, both frontline and relapsed or refractory. With the benefit of this guidance from FDA, the Company has moved forward with this pivotal cohort and expects to complete enrollment and generate topline data from the study within the next 12 to 18 months, with a biologics license application (BLA) submission expected in 2022.

Forward-Looking Statements

This Current Report on Form 8-K includes forward-looking statements based on management's current expectations. These statements include, but are not limited to, the Company's expectations related to: the occurrence, timing, and outcome of potential pre-clinical, clinical, and regulatory events related to the Company's product candidates, in particular with respect to IMGN632; and the presentation of pre-clinical and clinical data on the Company's product candidates, in particular with respect to IMGN632. For these statements, the Company claims the protection of the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995. Various factors could cause the Company's actual results to differ materially from those discussed or implied in the forward-looking statements, and you are cautioned not to place undue reliance on these forward-looking statements, which are current only as of the date of this Current Report on Form 8-K. Factors that could cause future results to differ materially from such expectations include, but are not limited to: the timing and outcome of the Company's pre-clinical and clinical development processes; the difficulties inherent in the development of novel pharmaceuticals, including uncertainties as to the timing, expense, and results of pre-clinical studies, clinical trials, and regulatory processes; the Company's ability to financially support its product programs; risks and uncertainties associated with the scale and duration of the COVID-19 pandemic and resulting impact on the Company's industry and business; and other factors more fully described in the Company's Annual Report on Form 10-K for the year ended December 31, 2019 and other reports filed with the Securities and Exchange Commission.

Item 9.01 - Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	Description
99.1	Press release of ImmunoGen, Inc. dated December 5, 2020.
99.2	Investor presentation to be presented by ImmunoGen, Inc. on December 7, 2020.
104	Cover Page Interactive Data File (embedded within the Inline XBRL (eXtensible Business Reporting Language) document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ImmunoGen, Inc. (Registrant)

Date: December 7, 2020

/s/ David G. Foster

David G. Foster Vice President, Finance



Exhibit 99.1

ImmunoGen Presents Updated Findings from Phase 1/2 Study of IMGN632 in Blastic Plasmacytoid Dendritic Cell Neoplasm at ASH Annual Meeting

Updated Data Demonstrating Favorable Safety Profile and Encouraging Monotherapy Activity in BPDCN Presented During Oral Session

Preclinical Combination Data in Relapsed/Refractory AML Support Further Evaluation of Triplet; Trial in Progress Poster for Phase 1b/2 Study Presented

Conference Call to be Held on Monday, December 7 at 8:00 a.m. ET

Waltham, MA - December 5, 2020 - ImmunoGen Inc. (Nasdaq: IMGN), a leader in the expanding field of antibody-drug conjugates (ADCs) for the treatment of cancer, today announced that new safety and efficacy findings from the expansion phase of the Phase 1/2 study of IMGN632 in patients with relapsed/refractory blastic plasmacytoid dendritic cell neoplasm (BPDCN) were presented during an oral session at the 62nd American Society of Hematology (ASH) Annual Meeting.

"Comprising the largest prospective study with a single agent in patients with relapsed/refractory BPDCN, the results presented at ASH build on the previous data reported for IMGN632 and reinforce the potential of this CD123-targeting ADC as a best-inclass treatment option for BPDCN," said Anna Berkenblit, MD, Senior Vice President and Chief Medical Officer of ImmunoGen. "Given IMGN632's favorable safety profile, demonstrated anti-tumor activity, and ease of administration via short infusion in an outpatient setting, we continue to enroll both frontline and relapsed/refractory BPDCN patients in this trial. In addition, the preclinical data presented by our partners at MD Anderson Cancer Center in relapsed/refractory AML further support the combination of IMGN632 with azacitidine and venetoclax, which we are actively enrolling in a Phase 1b/2 clinical trial."

"BPDCN is a rare, aggressive hematologic malignancy that is characterized by historically low overall survival rates," said Naveen Pemmaraju, MD, Associate Professor in the Department of Leukemia at MD Anderson Cancer Center. "Despite currently available therapies, outcomes for relapsed/refractory patients remain poor and there is an urgent need to develop bettertolerated treatment options in the frontline setting. These updated safety and efficacy findings for IMGN632 in patients with relapsed/refractory BPDCN are encouraging, and I look forward to advancing IMGN632 into pivotal development."

IMGN632 MONOTHERAPY DATA IN BPDCN

Title: "Clinical Profile of IMGN632, a Novel CD123-Targeting Antibody-Drug Conjugate, in Patients with Relapsed/Refractory Blastic Plasmacytoid Dendritic Cell Neoplasm" (Abstract #167) Oral Presentation Session: 616 Date: Saturday, December 5, 2020 Time: 12:30pm PT/3:30pm ET

Updated key findings include:

Safety

- IMGN632 demonstrated a favorable safety profile in 29 patients who received 0.045 mg/kg once every 3 weeks via a short (under 30 minutes) intravenous infusion, with limited grade ≥3 treatment-related adverse events (AEs) and no treatment-related deaths.
- The most common grade ≥3 AEs were febrile neutropenia, hyperglycemia, and thrombocytopenia (10% each).
- Grade ≥3 liver function test elevations were seen in one patient (3%).
- No capillary leak syndrome was reported.



Efficacy

- In all relapsed/refractory BPDCN patients, the overall response rate (ORR) was 29% (8/28) with a composite complete remission (CCR) rate of 18% (5/28).
- In patients with prior SL-401 exposure (tagraxofusp-erzs), the ORR was 31% (4/13) with a CCR of 15% (2/13).
- Among patients with bone marrow response assessment, 60% (9/15) achieved a bone marrow complete response (blasts <5%).
- Durable responses were seen in multiple patients, up to 9.2 months without hematopoietic stem cell transplant.
- Two patients have been successfully bridged to hematopoietic stem cell transplant.

TRIAL IN PROGRESS POSTER

Title: "A Phase 1b/2 Study of IMGN632, a CD123-Targeting Antibody-Drug Conjugate, As Monotherapy or in Combination with Venetoclax and/or Azacitidine for Patients with CD123-Positive Acute Myeloid Leukemia" (Abstract 1047)

Poster Session: 616 Date: Saturday, December 5, 2020

Time: 7:00am – 3:30pm PT/10:00am – 6:30pm ET

PRECLINICAL POSTER

In addition, our partners at MD Anderson Cancer Center will present preclinical data from their study combining IMGN632, venetoclax, and azacitidine in *in vitro* and *in vivo* AML models.

Title: "Combining IMGN632, a Novel CD123-Targeting Antibody Drug Conjugate with Azacitidine and Venetoclax Facilitates Apoptosis in Vitro and Prolongs Survival In Vivo in AML Models" (Abstract 2886)

Poster Session: 617

Date: Monday, December 7, 2020

Time: 7:00am – 3:30pm PT/10:00am – 6:30pm ET

Additional information can be found at www.hematology.org, including abstracts.

CONFERENCE CALL INFORMATION

ImmunoGen will hold a conference call on Monday, December 7 at 8:00 a.m. ET to discuss the data presented at ASH, the pathway to FDA approval in BPDCN, and an AML program progress update; Dr. Naveen Pemmaraju, Associate Professor in the Department of Leukemia at MD Anderson Cancer Center, will join the call to review the BPDCN data presented at ASH. To access the live call by phone, dial (877) 621-5803; the conference ID is 1795760. The call, along with associated slides, may also be accessed through the Investors and Media section of immunogen.com. Following the call, a replay will be available at the same location.

ABOUT IMGN632

IMGN632 is a CD123-targeting ADC in clinical development for hematological malignancies, including blastic plasmacytoid dendritic cell neoplasm (BPDCN), acute myeloid leukemia (AML), and acute lymphocytic leukemia (ALL). IMGN632 is currently being evaluated in multiple cohorts, including monotherapy for patients with BPDCN and minimal residual disease positive (MRD+) AML following frontline induction therapy and in combinations with Vidaza® (azacitidine) and Venclexta® (venetoclax) for patients with relapsed/refractory AML. IMGN632 uses one of ImmunoGen's novel indolinobenzodiazepine (IGN) payloads, which alkylate DNA without crosslinking. IGNs have been designed to have high potency against tumor cells, while demonstrating less toxicity to normal marrow progenitors than other DNA-targeting payloads. FDA has granted IMGN632 Breakthrough Therapy Designation in relapsed/refractory BPDCN.

ABOUT BLASTIC PLASMACYTOID DENDRITIC CELL NEOPLASM (BPDCN)

BPDCN is a rare form of blood cancer that has features of both leukemia and lymphoma, with characteristic skin lesions, lymph node involvement, and frequent spread to the bone marrow. This aggressive cancer requires intense treatment often followed by stem cell transplant. Despite the approval of a CD123-targeting therapy, the unmet need remains high for patients, both in the frontline and in the relapsed/refractory setting.

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ABOUT ACUTE MYELOID LEUKEMIA (AML)

AML is a cancer of the bone marrow cells that produce white blood cells. It causes the marrow to increasingly generate abnormal, immature white blood cells (blasts) that do not mature into effective infection-fighting cells. The blasts quickly fill the bone marrow, impacting the production of normal platelets and red blood cells. The resulting deficiencies in normal blood cells leave the patient vulnerable to infections, bleeding problems, and anemia. It is estimated that, in the U.S. alone, 21,380 patients will be diagnosed with AML this year and 10,590 patients will die from the disease.

ABOUT CD123

CD123, the interleukin-3 alpha chain, is expressed on multiple myeloid and lymphoid cancers including AML, BPDCN, ALL, chronic myeloid leukemia, and myeloproliferative neoplasms. With limited expression on normal hematopoietic cells, rapid internalization, and expression on AML leukemia stem cells, CD123 is a validated therapeutic target, with the approval of a CD123-targeting therapy for BPDCN.

ABOUT IMMUNOGEN

ImmunoGen is developing the next generation of antibody-drug conjugates (ADCs) to improve outcomes for cancer patients. By generating targeted therapies with enhanced anti-tumor activity and favorable tolerability profiles, we aim to disrupt the progression of cancer and offer our patients more good days. We call this our commitment to "target a better now."

Learn more about who we are, what we do, and how we do it at www.immunogen.com.

Vidaza® and Venclexta® are registered trademarks of their respective owners.

This press release includes forward-looking statements based on management's current expectations. These statements include, but are not limited to, ImmunoGen's expectations related to: the occurrence, timing, and outcome of potential pre-clinical, clinical, and regulatory events related to ImmunoGen's product candidates; and the presentation of pre-clinical and clinical data on ImmunoGen's product candidates. For these statements, ImmunoGen claims the protection of the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995. Various factors could cause ImmunoGen's actual results to differ materially from those discussed or implied in the forward-looking statements, and you are cautioned not to place undue reliance on these forward-looking statements, which are current only as of the date of this release. Factors that could cause future results to differ materially from such expectations include, but are not limited to: the timing and outcome of ImmunoGen's pre-clinical and clinical development processes; the difficulties inherent in the development of novel pharmaceuticals, including uncertainties as to the timing, expense, and results of pre-clinical studies, clinical trials, and regulatory processes; ImmunoGen's ability to financially support its product programs; risks and uncertainties associated with the scale and duration of the COVID-19 pandemic and resulting impact on ImmunoGen's filed with the Securities and Exchange Commission.

INVESTOR RELATIONS AND MEDIA ImmunoGen Courtney O'Konek 781-895-0600 courtney.okonek@immunogen.com

OR

FTI Consulting Robert Stanislaro 212-850-5657 robert.stanislaro@fticonsulting.com

Exhibit 99.2

IMGN632 Investor Call

December 7, 2020

FORWARD LOOKING STATEMENTS

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This presentation includes forward-looking statements based on management's current expectations. These statements include, but are not limited to, ImmunoGen's expectations related to: the occurrence, timing, and outcome of potential pre-clinical, clinical, and regulatory events related to ImmunoGen's product candidates; and the presentation of pre-clinical and clinical data on ImmunoGen's product candidates. For these statements, ImmunoGen claims the protection of the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995. Various factors could cause ImmunoGen's actual results to differ materially from those discussed or implied in the forward-looking statements, and you are cautioned not to place undue reliance on these forward-looking statements, which are current only as of the date of this release. Factors that could cause future results to differ materially from such expectations include, but are not limited to: the timing and outcome of ImmunoGen's pre-clinical and clinical development processes; the difficulties inherent in the development of novel pharmaceuticals, including uncertainties as to the timing, expense, and results of pre-clinical studies, clinical trials, and regulatory processes; ImmunoGen's ability to financially support its product programs; risks and uncertainties associated with the scale and duration of the COVID-19 pandemic and resulting impact on ImmunoGen's industry and business; and other factors more fully described in ImmunoGen's Annual Report on Form 10-K for the year ended December 31, 2019 and other reports filed with the Securities and Exchange Commission.

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BPDCN Landscape and IMGN632 Data at ASH

Naveen Pemmaraju, MD MD Anderson Cancer Center Associate Professor, Department of Leukemia IMGN632 Lead BPDCN Investigator

BPDCN Landscape

- BPDCN is a rare, aggressive hematologic malignancy characterized by historically poor overall survival and limited therapeutic options
- Overexpression of CD123 (IL-3Rα) is present in all BPDCN cases, thereby establishing this surface marker as a rational target for therapeutic intervention
- Despite the approval of ELZONRIS[®] (tagraxofusperzs), outcomes remain poor in the setting of relapsed and refractory (R/R) BPDCN and novel approaches are urgently needed

¹MDAnderson.org 2019; Pagano Haematologica 2013; Leukemia Lymphoma Society LLS.org.

500 to 1,000

ESTIMATE OF THE INCIDENCE OF NEWLY DIAGNOSED BPDCN PATIENTS IN THE US ANNUALLY¹; 60-70% BECOME R/R

IMGN632: Novel CD123-Targeting ADC Active in BPDCN and AML

- Novel Anti-CD123 Antibody
 - High affinity binding to CD123
 - Unique epitope in extracellular domain
- Novel IGN Payload (DGN549)¹
 - DNA-alkylating activity, single strand DNA breaks (vs. double strand)
 - Uniform drug antibody ratio (DAR=2)
- Novel Peptide Linker
 - Confers greater stability in circulation
 - Efficient intracellular payload release



IMGN632 demonstrated 22-40% ORR in R/R AML at the RP2D of 0.045 mg/kg every 3 weeks, in subgroups of de novo and relapsed patients and a 33% (3 of 9) ORR in R/R BPDCN²

6 ¹Kovtun Blood Adv 2018; ²ASH 2019 Oral Presentation; Daver, N., et al. IGN: Indolinobenzodiazepine; DAR: drug:antibody ratio; ORR: overall response rate; RP2D: recommended phase 2 dose

ASH 2020 Data: Phase 1/2 801 Study Patient Characteristics (n=29)

Age years, median (range)		72y (19-82)	
Gender, % (n)	Male	76% (22)	
	Female	24% (7)	
Disease, % (n)	Compartment involvement		
	Skin	69% (20)	
	Bone marrow	62% (18)	
	Lymph node/visceral	52% (15)	
	Prior/concurrent malignancy	24% (7)	
Baseline status, % (n)	First relapse	21% (6)	
	Primary refractory	59% (17)	
	Relapsed	17% (5)	
	Untreated	3% (1)	
Prior therapy, % (n)	Pts with ≥2 prior therapies	45% (13)	
	Prior Intense therapies	52% (15)	
	Prior exposure to tagraxofusp-erzs	45% (13)	
	Prior allogeneic stem cell transplant	24% (7)	
ASH 2020 Oral Presentation; Pemmaraju, N., et al.			immun•g

ASH 2020 Data: Phase 1/2 801 Study Favorable Safety Profile (n=29)



8 ASH 2020 Oral Presentation; Pemmaraju, N., et al. AE: adverse event; LFT: liver function tests; DLT: dose limiting toxicity; VOD: veno-occlusive disease; TEAEs: treatment emergent adverse events

ASH 2020 Data: Phase 1/2 801 Study Efficacy in R/R BPDCN

- In all R/R BPDCN patients:
 - Overall response rate (ORR) 29% (8/28, 2 CR, 2 CRc*, 1 CRi, 3 PR)
 - Composite complete remission rate (CCR#) of 18% (5/28)
- Importantly, in patients with prior tagraxofusp exposure:
 - ORR was 31% (4/13, 1 CR, 1CRi, 2 PR)
 - CCR of 15% (2/13)
- Among 15 patients with bone marrow response assessment to date, 60% (9/15) achieved a bone marrow complete remission (blasts <5%), most (78%, 7/9) also achieving an overall response



ASH 2020 Oral Presentation; Pemmaraju, N., et al. CR: complete response; "CR:: clinical CR = CR criteria EXCEPT limited residual skin disease "marked clearance of all skin lesions from baseline; residual hyperpigmentation or abnormality with BPDCN identified on biopsy (or no biopsy performed)" CRI: complete remission with incomplete hematologic recovery; PR: partial response; "CCR: CR+CRc+Cri

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ASH 2020 Data: Phase 1/2 801 Study Time on Treatment and Response

- Responses are often rapid: mean time to response 1.1 months (range 0.7-3.5)
- 39% (11/28) remain on treatment
- Durable responses seen (up to 9.2 months) without transplant





ASH 2020 Oral Presentation; Pemmaraju, N., et al. SCT: Stem Cell Transplant; MDS: myelodysplastic syndrome CLAG-M: cladribine, cytarabine, and filgrastim with mitoxantrone or without mitoxantrone (CLAG); PET: positron emission tomography; BM: bone marrow

Advancing IMGN632 in BPDCN and Relapsed/Refractory AML

Anna Berkenblit, MD SVP and Chief Medical Officer ImmunoGen

BPDCN Regulatory Update: Path to Full Approval



Path to Full Approval in BPDCN: 801 Pivotal Cohort Design



Path Forward in AML: IMGN632 in Combination

PRE-CLINICAL COMBINATION DATA¹

In CD123+ AML patient-derived xenograft models, the triplet combination significantly improved survival compared to VEN+AZA

- In a model sensitive to VEN+AZA, the triplet demonstrated significant improvement in survival
- In two models refractory to VEN+AZA, the triplet demonstrated the potential to overcome VEN+AZA resistance

DOSE ESCALATION AND EXPANSION COHORTS²



14 ¹ASH 2020 Poster; Kuruvilla, V., et al. VEN: venetoclax; AZA: azacitidine. ³ASH 2020 Poster; Daver, N., et al.

ALL REGIMENS ACTIVE
NO DLTs in TRIPLET
ENROLLING PATIENTS
DATA ANTICIPATED MID 2021
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Concluding Remarks

Mark Enyedy President and Chief Executive Officer ImmunoGen

IMGN632 Summary

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Q&A