SANGAMO BIOSCIENCES, INC. 501 CANAL BOULEVARD RICHMOND, CALIFORNIA 94804

April 25, 2016

VIA EDGAR

Securities and Exchange Commission Division of Corporation Finance 100 F Street, NE Washington, DC 20549 Mail Stop 4720 Attention: Michael Gershon Erin K. Jaskot

Re: Sangamo BioSciences, Inc. Post-Effective Amendment No. 2 to Registration Statement on Form S-3ASR Filed February 18, 2016 File No. 333-194126

Dear Mr. Gershon:

In accordance with Rule 461 under the Securities Act of 1933, as amended, Sangamo BioSciences, Inc. (the "Company") hereby requests the acceleration of the effective date of the above referenced Post-Effective Amendment No. 2 to Registration Statement on Form S-3ASR of the Company so that it will become effective on April 27, 2016 at 5:00 p.m. Eastern Time, or as soon thereafter as practicable.

In connection therewith, the Company acknowledges that:

- Should the Securities and Exchange Commission (the "Commission") or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- The action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- The Company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Very truly yours,

SANGAMO BIOSCIENCES, INC.

By: /s/ Edward O. Lanphier II Name: Edward O. Lanphier II Title: Chief Executive Officer

cc: Suzanne Hayes, Assistant Director, Division of Corporation Finance