

SANGAMO BIOSCIENCES INC

FORM S-3/A

(Securities Registration Statement (simplified form))

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CIK	0001001233
Industry	Business Services
Sector	Services
Fiscal Year	12/31

As filed with the Securities and Exchange Commission on October 17, 2001

Registration No. 333-68066

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Amendment No. 1
to
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

SANGAMO BIOSCIENCES, INC.
(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

8731
(Primary Standard Industrial
Classification Code Number)

68-0359556
(I.R.S. Employer
Identification No.)

501 Canal Boulevard
Richmond, California 94804
(510) 970-6000
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Edward O. Lanphier, II
President and Chief Executive Officer
Sangamo BioSciences, Inc.
501 Canal Boulevard
Richmond, California 94804
(510) 970-6000
(Name, address, including zip code, and telephone number, including area code, of agent for service of process)

Copies to:

John W. Larson
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effective.

If the only securities being registered on this form are being offered pursuant to a dividend or interest reinvestment plans, please check the following box. //

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. /x/

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. // _____

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. // _____

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. //

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that the Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED OCTOBER 17, 2001

PROSPECTUS

2,124,638 Shares



SANGAMO BIOSCIENCES, INC.

Common Stock

This prospectus relates to the public offering, which is not being underwritten, of 2,124,638 shares of our common stock which is held by some of our current stockholders.

The prices at which those stockholders may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions. We will not receive any of the proceeds from the sale of the shares.

Our common stock is quoted on the Nasdaq National Market under the symbol "SGMO." On October 16, 2001, the closing price of our common stock was \$7.94.

Investing in our common stock involves risks. See "Risk Factors" beginning on page 1.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus is October , 2001.

SANGAMO BIOSCIENCES, INC.

In this prospectus, the terms "Sangamo," "Company," "we," "us" and "our" refer to Sangamo BioSciences, Inc.

Sangamo is the worldwide leader in the research, development, and commercialization of engineered transcription factors for the regulation of gene expression. Our Universal Gene Recognition™ platform is a proprietary technology based on the engineering of a naturally occurring class of transcription factors referred to as zinc finger DNA-binding proteins, or ZFPs. We believe that Universal Gene Recognition is a fundamentally enabling technology, widely applicable to pharmaceutical discovery, development of human therapeutics, plant agriculture, industrial biotechnology and clinical diagnostics. We intend to commercialize our technology broadly over its many applications.

Our executive offices are located at 501 Canal Boulevard, Richmond, California 94804, and the telephone number at that address is (510) 970-6000.

RISK FACTORS

An investment in our common stock is risky. You should carefully consider the following risks, as well as the other information contained in this report. If any of the following risks actually occurs, it would harm our business. In that case, the trading price of our common stock could decline, and you might lose all or a part of your investment. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently see as immaterial, may also harm our business.

Risks Related to Our Business

Our gene regulation technology is unproven and if we are unable to use this technology in all our intended applications, it would limit our revenue opportunities.

Our technology involves new and unproven approaches to gene regulation. Although we have generated some ZFP TFs for some gene sequences, we have not created ZFP TFs for all gene sequences and we may not be able to create ZFP TFs for all gene sequences which would limit the usefulness of our technology. In addition, while we have demonstrated the function of engineered ZFP TFs in mammalian cell culture, yeast, insects, plants and animals, we have not done so in humans and many other organisms, and the failure to do so could restrict our ability to develop commercially viable products. If we and our Universal GeneTools™ collaborators or strategic partners are unable to extend our results to new gene sequences and experimental animal models, we may be unable to use our technology in all its intended applications. Also, delivery of ZFP TFs into cells in these and other environments is limited by a number of technical challenges, which we may be unable to surmount.

The utility of our ZFP TFs is in part based on the belief that the regulation of gene expression may help scientists better understand the role of human, animal, plant and other genes in drug discovery, as well as therapeutic, diagnostic, agricultural and industrial biotechnology applications. There is only a limited understanding of the role of genes in all these fields. Life sciences companies have developed or commercialized only a few products in any of these fields based on results from genomic research or the ability to regulate gene expression. We, our Universal GeneTools™ collaborators or our strategic partners may not be able to use our technology to identify and validate drug targets or other targets in order to develop commercial products.

If our technology does prove to be effective, it still may not lead to commercially viable products, which would reduce our revenue opportunities.

Even if our Universal GeneTools™ collaborators or strategic partners are successful in identifying drug targets or other targets based on discoveries made using our ZFP TFs, they may not be able to discover or develop commercially viable products or may determine to pursue products that do not use our technology. To date, no company has developed or commercialized any therapeutic, diagnostic, agricultural or industrial biotechnology products based on our technology. The failure of our technology to provide safe, effective, useful or commercially viable approaches to the discovery and development of these products would significantly limit our business plan and future growth.

Initial evaluations of our engineered ZFP TFs delivered to our Universal GeneTools™ collaborators have produced mixed results.

Some of our Universal GeneTools™ collaborators were unable to substantiate the effects of our gene regulation technology. Generally, failures were re-evaluated at Sangamo using our current approach of examining the local chromatin structure for accessible sites and then targeting ZFP TFs to these areas. In most cases, additional ZFP TFs were designed and tested for these targets, and data was generated at Sangamo, or by our partners, confirming the ability to regulate these targets. Sangamo performs this more extensive validation on all Universal GeneTools™ targets prior to use by external parties. However, there can be no assurances that we will be able to regulate all gene targets, and repression of a gene is usually more difficult than activation. Although we have been able to achieve repression in numerous genes, the degree of repression may not be sufficient to permit our collaborators to realize their objectives. For example, one of our collaborators has advised us that while some of our ZFP TFs delivered to them repressed certain target gene sequences to a significant extent the repression was not complete enough to warrant proceeding to develop revised ZFP TFs for this purpose. However, this collaborator has advised us that positive results were achieved using our ZFP TFs to regulate other target gene sequences. In addition, some of our collaborators have not yet generated the final results of their testing, and no assurances can be given that our collaborators will be able to achieve satisfactory results. These ZFP TFs, or ones engineered in the future, may not function as intended. If we are unsuccessful in engineering ZFP TFs that achieve positive results for our collaborators or strategic partners, this would significantly harm our business by reducing our revenues.

If our competitors develop, acquire or market technologies or products that are more effective than ours, this would reduce or eliminate our commercial opportunity.

Any products that we or our collaborators or strategic partners develop using our Universal Gene Regulation™ technology platform will participate in highly competitive markets. Even if we are able to generate ZFP TFs that achieve useful results, competing technologies may prove to be more effective or less expensive which would limit or eliminate our revenue opportunities. Competing technologies may include other methods of regulating gene expression. Universal Gene Recognition™ has broad application in the life sciences, and competes with a broad array of new technologies and approaches being applied to genetic research by many companies. Competitive technologies include those used to analyze the expression of genes in cells or tissues, determine gene function, discover new genes, analyze genetic information and regulate genes. Our competitors include biotechnology companies with:

- competing proprietary technology;
- substantially greater capital resources than ours;
- larger research and development staffs and facilities than ours;
- greater experience in product development and in obtaining regulatory approvals and patent protection; and

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- greater manufacturing and marketing capabilities than we do.

These organizations also compete with us to:

- attract qualified personnel;
- attract parties for acquisitions, joint ventures or other collaborations; and
- license the proprietary technologies of academic and research institutions that are competitive with our technology which may

preclude us from pursuing similar opportunities.

Accordingly, our competitors may succeed in obtaining patent protection or commercializing products before us. In addition, any products that we develop may compete with existing products or services that are well established in the marketplace.

Failure to attract, retain and motivate skilled personnel and cultivate key academic collaborations will delay our product development programs and our research and development efforts.

We are a small company with 84 employees as of June 30, 2001 and our success depends on our continued ability to attract, retain and motivate highly qualified management and scientific personnel, and our ability to develop and maintain important relationships with leading academic and other research institutions and scientists. Competition for personnel and academic and other research collaborations is intense. The success of our technology development programs depends on our ability to attract and retain highly trained personnel. If we lose the services of personnel with these types of skills, it could impede significantly the achievement of our research and development objectives. If we fail to negotiate additional acceptable collaborations with academic and other research institutions and scientists, or if our existing collaborations are unsuccessful, our technology development programs may be delayed or may not succeed.

At present the scope of our needs is somewhat limited to the expertise of personnel who are able to engineer ZFP TFs and apply them to gene regulation. In the future, we will need to hire additional personnel and develop additional academic collaborations as we continue to expand our research and development activities and to work on some of our planned projects because these activities and projects will require additional expertise in disciplines applicable to the products we would develop with them. Further, our planned activities will require existing management to develop additional expertise. We do not know if we will be able to attract, retain or motivate the required personnel to achieve our goals.

We may have difficulty managing our growth, which may slow our growth rate or give rise to inefficiencies which would reduce our profits.

We have recently experienced, and expect to continue to experience, growth in the number of our employees and the scope of our operating and financial systems. This growth has resulted in an increase in responsibilities for both existing and new management personnel. Our ability to manage growth effectively will require us to continue to implement and improve our operational, financial and management information systems and to recruit, train, motivate and manage our employees. We may not be able to efficiently manage our growth and expansion, and the failure to do so may slow our growth rate or give rise to inefficiencies which would reduce our profits.

If we are unable to successfully integrate our recent acquisition of Gendaq Limited or any future acquisition, our business would suffer.

In July 2001, we acquired Gendaq Limited, a London-based biotechnology company. In connection with the acquisition, we acquired all of the business of Gendaq including a research team of 16

scientists, 22 patent applications and two issued patents. Acquisitions of this type involve a number of risks, including:

- difficulties in assimilating the operations and employees of the acquired company;
- diversion of management's attention from ongoing business concerns;
- difficulties in incorporating the acquired technology and rights into our research and product offerings;
- maintenance of uniform standards, controls procedures and policies; and
- additional expense associated with charges allocated to in-process research and development.

Acquisitions are likely to result in a dilutive issuance of equity securities. For example, we issued common stock and replacement stock options in connection with our acquisition of Gendaq. We cannot assure you that any acquisition will enhance our future commercial success or generate sufficient net revenues to offset the associated costs of the acquisition.

We may experience difficulty in managing our international operations.

Our subsidiary, Gendaq Limited, is located in London and is incorporated under the laws of the United Kingdom. Because we do not have experience in managing international subsidiaries, we may experience difficulty in managing our new international operations.

We are at an early stage of development and may not succeed or become profitable.

We began operations in 1995 and are at an early stage of development. We have incurred significant losses to date, and our revenues have been generated from federal government research grants, Universal GeneTools™ collaborators and strategic partners. Our Universal GeneTools™ collaborators are evaluating our ZFP TFs. If the ZFP TFs do not provide sufficient value to those collaborators, then they may not continue to work with us. This may also impair our ability to attract additional collaborators. As a result, our business is subject to all of the risks inherent in the development of a new technology, which includes the need to:

- attract additional new Universal GeneTools™ collaborators and strategic partners and expand existing relationships;
- attract and retain qualified scientific and technical staff and management, particularly scientific staff with expertise to further apply and develop our early stage technology;
- attract and enter into research collaborations with academic and other research institutions and scientists;
- obtain sufficient capital to support the expense of developing our technology platform and developing, testing and commercializing products;
- develop a market for our products; and
- successfully transition from a company with a research focus to a company capable of supporting commercial activities.

In addition to competitive pressures, problems frequently encountered with research, development and commercialization of new technologies and products will likely affect us. Most of our ZFP TF design and testing procedures take place on a relatively small scale. In the future, we intend to apply ZFP TF design and testing procedures at a scale involving hundreds of genes per year. We may not be able to successfully or efficiently achieve this scale. In addition, while we have had success in applying

ZFP TF gene regulation in our laboratories, we may have difficulty in transferring our technology to our collaborators' and strategic partners' laboratories.

We anticipate continuing to incur operating losses for at least two years. If material losses continue for a longer period, we may be unable to continue our operations.

We have generated operating losses since we began operations in 1995. The extent of our future losses and the timing of profitability are highly uncertain, and we may not be profitable in the foreseeable future. We have been engaged in developing our Universal Gene Recognition™ technology since inception, which has and will continue to require significant research and development expenditures. To date, we have generated our revenues from federal government research grants, Universal GeneTools™ collaboration agreements and strategic partnership agreements. As of June 30, 2001, we had an accumulated deficit of approximately \$22.3 million. Even if we succeed in increasing our current product and research revenue or developing additional commercial products, we expect to incur losses in the near future and may continue to incur losses for at least the next two years. These losses may increase as we expand our research and development activities. If the time required to generate significant product revenues and achieve profitability is longer than we currently anticipate, we may not be able to sustain our operations.

We may require additional financing. If we are unable to obtain this financing, we will be unable to develop our technology and products.

We do not know whether we will require additional financing, or that, if acquired, it will be on terms favorable to our stockholders or us. We have consumed substantial amounts of cash to date and expect capital outlays and operating expenditures to increase over the next several years as we expand our infrastructure and research and development activities. We may raise this financing through public or private financings or additional Universal GeneTools™ collaborations, strategic partnerships or licensing arrangements. If additional financing becomes necessary in the future, it would likely be at least tens of millions of dollars.

While we believe our current financial resources should be adequate to sustain our operations for two years, it is not possible to estimate our financial requirements thereafter. However, to the extent we concentrate our efforts on proprietary human therapeutics, we will require FDA approval and extensive clinical trials of our potential products. This process may cost in excess of \$100 million per product.

Factors beyond our control could cause our quarterly results to fluctuate.

We believe that period-to-period comparisons of our results of operations are not necessarily meaningful and should not be relied upon as indicators of future performance. The variability of receipt of funds from corporate partners, as well as the implementation of new accounting pronouncements, may lead to quarterly fluctuations in our earnings. We generally operate with limited backlog in our Universal GeneTools™ business because our ZFP TFs are typically designed and engineered as orders are received. As a result, product sales in any quarter are generally dependent on orders received and shipped in that quarter. Universal GeneTools™ sales are also difficult to forecast because demand varies substantially from customer to customer and from period to period. While strategic partnerships may provide us with committed quarterly research funding, the signing of such deals, and the subsequent initiation of revenue recognition, is also uncertain.

Due to all of the foregoing factors, it is possible that in one or more future quarters our results may fall below the expectations of public market analysts and investors. In such event, the trading price of our common stock would likely be adversely impacted.

Our Universal GeneTools™ collaboration agreements with companies are of limited scope, and if we are not able to expand the scope of our existing collaborations or enter into new ones, our revenues will be negatively impacted and our research initiatives may be slowed or halted.

Our Universal GeneTools™ collaborations are important to us because they permit us to introduce our technology to many companies by supplying them with a specified ZFP TF for a payment without licensing any of our technology. The collaboration agreements, however, are of limited scope. Under most of our current Universal GeneTools™ collaborations we receive a payment for supplying ZFP TFs for gene targets specified by the companies. These companies are not obligated to make continuing payments to us in connection with their research efforts or to pursue any product development program with us. As a result, we may not develop long-term relationships with these companies that could lead to additional revenues. If we are not able to expand the scope of our existing collaborations or enter into new ones, we may have reduced revenues and be forced to slow or halt research initiatives.

Commercialization of our technologies depends on strategic partnering with other companies, and if we are not able to find strategic partners in the future, we may not be able to develop our technologies or products, which could slow our growth and decrease our revenues.

We expect to rely, to some extent, on our strategic partners to provide funding in support of our research and to perform some independent research, preclinical and clinical testing. Our technology is broad based and we do not currently possess the resources necessary to develop and commercialize potential products that may result from our technologies, or the resources or capabilities to complete any approval processes that may be required for the products, therefore we must enter into additional strategic partnerships to develop and commercialize products. Of the thousands of ZFP TFs which target specific genes, our current collaborators and strategic partners are working with less than 100, therefore in order to fully utilize our ZFP transcriptions factors we would need a number of new Universal GeneTools™ collaborators and strategic partners to accomplish our research.

We may require significant time to secure additional collaborations or strategic partners because we need to effectively market the benefits of our technology to these future collaborators and strategic partners, which uses the time and efforts of research and development personnel and our management. Further, each collaboration or strategic partnering arrangement will involve the negotiation of terms that may be unique to each collaborator or strategic partner. These business development efforts may not result in a collaboration or strategic partnership.

If we do not enter into additional strategic partnering agreements, we will experience reduced revenues and may not develop or commercialize our products. The loss of our current or any future strategic partnering agreement would not only delay or terminate the potential development or commercialization of any products we may derive from our technologies but also delay or terminate our ability to test ZFP TFs for specific genes. If any strategic partner fails to conduct the collaborative activities successfully and in a timely manner, the preclinical or clinical development or commercialization of the affected product candidates or research programs could be delayed or terminated.

Our existing strategic partnering agreements are, and we would expect any future arrangement to be based on the achievement of milestones. Under the strategic partnering agreements, we expect to receive revenue for the research and development of products based on achievement of specific milestones. Achieving these milestones will depend, in part, on the efforts of our strategic partner as well as our own. In contrast, our current Universal GeneTools™ collaboration agreements only pay us to supply ZFP TFs for the collaborator's independent use, rather than for future results of the collaborator's efforts. If we or any strategic partner fails to meet specific milestones, then the strategic partnership can be terminated which could result in a decrease in our future revenues.

Our Universal GeneTools™ collaborators and strategic partners may decide to adopt alternative technologies or may be unable to develop commercially viable products using our technology, which would negatively impact our revenues and our strategy to develop these products.

Our collaborators or strategic partners may adopt alternative technologies of our competitors which could decrease the marketability of our technology. Because many of our Universal GeneTools™ collaborators or strategic partners are likely to be working on more than one research project, they could choose to shift their resources to projects other than those they are working on with us. If they do so, that would delay our ability to test our technology and would delay or terminate the development of potential products based on our gene regulation technology. Further, our collaborators and strategic partners may elect not to develop products arising out of our collaborative and strategic partnering arrangements or to devote sufficient resources to the development, manufacturing, marketing or sale of these products. If any of these events occur, we may not be able to develop our technologies or commercialize our products.

We may be unable to license gene transfer technologies that we may need to commercialize our Universal Gene Recognition™ technology.

In order to regulate an endogenous gene, the ZFP TF must be delivered to a cell. We have licensed certain gene transfer technology for use with our Universal GeneTools™ in pharmaceutical discovery. We are evaluating this and other technologies which may need to be used in the delivery of ZFP TFs into cells for *in vitro* and *in vivo* applications. However, we may not be able to license the gene transfer technologies required to develop and commercialize our Universal Gene Recognition™ technology. We have not developed our own gene transfer technologies and rely on our ability to enter into license agreements to provide us with rights to the necessary gene transfer technology. The inability to obtain a license to use gene transfer technologies with entities which own such technology on reasonable commercial terms, if at all, could delay or prevent the preclinical evaluation, clinical testing and/or commercialization of our therapeutic product candidates.

We intend to conduct proprietary research programs to discover therapeutic product candidates. These programs increase our risk of product failure, may significantly increase our research expenditures, and may involve conflicts with our collaborators and strategic partners.

Conducting proprietary research programs may not generate corresponding revenue and may create conflicts with our collaborators or strategic partners. The implementation of this strategy will involve substantially greater business risks and the expenditure of significantly greater funds than our current research activities. In addition, these programs will require substantial commitments of time from our management and staff. Moreover, we have no experience in preclinical or clinical testing, obtaining regulatory approval or commercial-scale manufacturing and marketing of therapeutic products, and we currently do not have the resources or capability to manufacture therapeutic products on a commercial scale. In order for us to commercialize these products directly, we would need to develop, or obtain through outsourcing arrangements, the capability to execute all of these functions, market and sell products. We do not have these capabilities, and we may not be able to develop or otherwise obtain the requisite preclinical, clinical, regulatory, manufacturing, marketing and sales capabilities.

In addition, disagreements with our Universal GeneTools™ collaborators or strategic partners could develop over rights to our intellectual property with respect to our proprietary research activities. Any conflict with our collaborators or strategic partners could reduce our ability to enter into future collaboration or strategic partnering agreements and negatively impact our relationship with existing collaborators and strategic partners, which could reduce our revenue and delay or terminate our product development.

Because it is difficult and costly to protect our proprietary rights, and third parties have filed patent applications that are similar to ours, we cannot ensure the proprietary protection of our technologies and products.

Our commercial success will depend in part on obtaining patent protection of our technology and successfully defending these patents against third-party challenges. The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date. Accordingly, we cannot predict the breadth of claims allowed in patents we own or license.

We are a party to various license agreements that give us rights under specified patents and patent applications. Our current licenses, and our future licenses, will contain performance obligations. If we fail to meet those obligations, the licenses could be terminated. If we are unable to continue to license these technologies on commercially reasonable terms, or at all, we may be forced to delay or terminate our product development and research activities.

With respect to our present and any future sublicenses, since our rights derive from those granted to our sublicensor, we are subject to the risk that our sublicensor may fail to perform its obligations under the master license or fail to inform us of useful improvements in, or additions

to, the underlying intellectual property owned by the original licensor.

We are unable to exercise the same degree of control over intellectual property that we license from third parties as we exercise over our internally developed intellectual property. We generally do not control the prosecution of patent applications that we license from third parties; therefore, the patent applications may not be prosecuted in a timely manner.

- The degree of future protection for our proprietary rights is uncertain and we cannot ensure that:
- we or our licensors were the first to make the inventions covered by each of our pending patent applications;
- we or our licensors were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or reverse engineer any of our products, processes or technologies;
- any of our pending patent applications will result in issued patents;
- any patents issued or licensed to us or our Universal GeneTools™ collaborators or strategic partners will provide a basis for commercially viable products or will provide us with any competitive advantages or will not be challenged and invalidated by third parties;
- we will develop additional products, processes or technologies that are patentable; or
- the patents of others will not have an adverse effect on our ability to do business.

Others have filed and in the future are likely to file patent applications that are similar to ours. We are aware that there are academic groups and other companies that are attempting to develop technology which is based on the use of zinc finger and other DNA-binding proteins, and that these groups and companies have filed patent applications. Several patents have been issued, although Sangamo has no current plans to use the associated inventions. More particularly, we are aware of pending patent applications with claims directed to zinc finger libraries and methods of designing zinc finger DNA-binding proteins. These applications are not issued patents. If the pending claims were granted in their present form, however, they could interfere with our right to commercialize our products and processes. If these or other patents issue, it is possible that the holder of any patent or

patents granted on these applications may bring an infringement action against our collaborators, strategic partner or us claiming damages and seeking to enjoin commercial activities relating to the affected products and processes. The costs of litigating the claim could be substantial. Moreover, we cannot predict whether our Universal GeneTools™ collaborators, strategic partners or we would prevail in any actions. In addition, if the relevant patent claims were upheld as valid and enforceable and our products or processes were found to infringe the patent or patents, we could be prevented from making, using or selling the relevant product or process unless we could obtain a license or were able to design around the patent claims. While we believe that our proprietary intellectual property would give us substantial leverage to secure a cross-license, it is uncertain that any license required under that patent or patents would be made available on commercially acceptable terms, if at all. We believe that there may be significant litigation in the genomics industry regarding patent and other intellectual property rights which could subject us to litigation. If we become involved in litigation, it could consume a substantial portion of our managerial and financial resources.

We rely on trade secrets to protect technology where we believe patent protection is not appropriate or obtainable. Trade secrets, however, are difficult to protect. While we require employees, academic collaborators and consultants to enter into confidentiality agreements, we may not be able to adequately protect our trade secrets or other proprietary information or enforce these confidentiality agreements.

Our Universal GeneTools™ collaborators, strategic partners and scientific advisors have rights to publish data and information in which we may have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations and strategic partnerships, then we may not be able to receive patent protection or protect our proprietary information.

Our potential therapeutic products are subject to a lengthy and uncertain regulatory process, and if these potential products are not approved, we will not be able to commercialize those products.

The FDA must approve any therapeutic and some diagnostic products based on ZFP TF technology before it can be marketed in the United States. The process for receiving regulatory approval is long and uncertain, and even if we had a potential product, this product may not withstand the rigors of testing under the regulatory approval processes. Before commencing clinical trials in humans, we must submit and receive approval from the FDA of an Investigational New Drug Application. Clinical trials are subject to oversight by institutional review boards and the FDA, and these trials must meet particular conditions, such that they:

- must be conducted in conformance with the FDA's good clinical practice regulations;
- must meet requirements for institutional review board oversight;
- must meet requirements for informed consent;
- are subject to continuing FDA oversight;
- may require large numbers of test subjects; and
- may be suspended by us or the FDA at any time if it is believed that the subjects participating in these trials are being exposed to unacceptable health risks or if the FDA finds deficiencies in the Investigational New Drug application or the conduct of these trials.

We must also demonstrate that the product is safe and effective in the patient population that will be treated. Data obtained from preclinical and clinical activities are susceptible to varying interpretations that could delay, limit or prevent regulatory clearances. In addition, we may encounter delays or rejections based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials

and FDA regulatory review. Failure to comply with applicable FDA or other applicable regulatory requirements may result in criminal prosecution, civil penalties, recall or seizure of products, total or partial suspension of production or injunction, as well as other regulatory action against our potential products or us. Additionally, we have no experience in conducting and managing the clinical trials necessary to obtain regulatory approval.

In addition, we may also require approval from the Recombinant DNA Advisory Committee, or RAC, which is the advisory board to the National Institutes of Health, or NIH, focusing on clinical trials involving gene transfer.

We have not submitted an application with the FDA or any other regulatory authority for any product candidate, and neither the FDA nor any other regulatory authority has approved any therapeutic, diagnostic, agricultural or industrial product candidate developed with our technology for commercialization in the United States or elsewhere.

Regulatory approval, if granted, may be limited to specific uses or geographic areas which could limit our ability to generate revenues.

Regulatory approval may limit the indicated use for which we can market a product. Further, once regulatory approval for a product is obtained, it and its manufacturer are subject to continual review. Discovery of previously unknown problems with a product or manufacturer may result in restrictions on the product, manufacturer and manufacturing facility, including withdrawal of the product from the market. In Japan and Europe, regulatory agencies also set or approve prices.

Even if regulatory clearance of a product is granted, this clearance is limited to those specific states and conditions for which the product is useful as demonstrated through clinical trials. We cannot ensure that any therapeutic product developed by us, alone or with others, will prove to be safe and effective in clinical trials and will meet all of the applicable regulatory requirements needed to receive marketing clearance.

Outside the United States, our ability to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities so we cannot predict whether or when we would be permitted to commercialize our product. These foreign regulatory approval processes include all of the risks associated with FDA clearance described above.

Laws or public sentiment may limit our production of genetically engineered agricultural products in the future, and these laws could reduce our ability to sell these products.

Genetically engineered products are currently subject to public debate and heightened regulatory scrutiny, either of which could prevent or delay production of agricultural products. We may develop genetically engineered agricultural products for ourselves or with our strategic partners. The field testing, production and marketing of genetically engineered plants and plant products are subject to federal, state, local and foreign governmental regulation. Regulatory agencies administering existing or future regulations or legislation may not allow production and marketing of our genetically engineered products in a timely manner or under technically or commercially feasible conditions. In addition, regulatory action or private litigation could result in expenses, delays or other impediments to our product development programs or the commercialization of resulting products.

The FDA currently applies the same regulatory standards to foods developed through genetic engineering as applied to foods developed through traditional plant breeding. Genetically engineered food products, however, will be subject to premarket review if these products raise safety questions or are deemed to be food additives. Governmental authorities could also, for social or other purposes, limit the use of genetically engineered products created with our gene regulation technology.

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Even if we are able to obtain regulatory approval of genetically engineered products, our success will also depend on public acceptance of the use of genetically engineered products including drugs, plants and plant products. Claims that genetically engineered products are unsafe for consumption or pose a danger to the environment may influence public attitudes. Our genetically engineered products may not gain public acceptance. The subject of genetically modified organisms has received negative publicity in Europe, which has aroused public debate. The adverse publicity in Europe could lead to greater regulation and trade restrictions on imports of genetically altered products. If similar adverse public reaction occurs in the United States, genetic research and its resulting products could be subject to greater domestic regulation and could decrease the demand for our technology and products.

If conflicts arise between us and our collaborators, strategic partners, scientific advisors or directors, these parties may act in their self-interest, which may limit our ability to implement our strategies.

If conflicts arise between us and our corporate or academic collaborators, strategic partners or scientific advisors or directors, the other party may act in its self-interest which may limit our ability to implement our strategies. Some of our Universal GeneTools™ or academic collaborators or strategic partners are conducting multiple product development efforts within each area that is the subject of the collaboration with us. Generally, in each of our collaborations, we have agreed not to conduct independently, or with any third party, any research that is competitive with the research conducted under our collaborations. Our collaborations may cause us to limit the areas of research that we pursue, either alone or with others. Our collaborators or strategic partners, however, may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by the collaborators or strategic partners or to which the collaborators or strategic partners have rights, may result in their withdrawal of support for our product candidates.

Some of our collaborators or strategic partners could also become competitors in the future. Our collaborators or strategic partners could develop competing products, preclude us from entering into collaborations with their competitors, fail to obtain timely regulatory approvals, terminate their agreements with us prematurely or fail to devote sufficient resources to the development and commercialization of products. Any of these developments could harm our product development efforts.

Our collaborations with outside scientists may be subject to change which could limit our access to their expertise.

We work with scientific advisors and collaborators at academic research institutions. These scientists are not our employees and may have other commitments that would limit their availability to us. Although our scientific advisors generally agree not to do competing work, if a conflict of interest between their work for us and their work for another entity arises, we may lose their services. Although our scientific advisors and academic collaborators sign agreements not to disclose our confidential information, it is possible that some of our valuable proprietary knowledge may become publicly known through them.

If we use biological and hazardous materials in a manner that causes injury or violates laws, we may be liable for damages.

Our research and development activities involve the controlled use of potentially harmful biological materials as well as hazardous materials, chemicals and various radioactive compounds. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for damages that result, and any liability could exceed our resources. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with these laws and regulations could be significant.

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Anti-takeover provisions in our certificate of incorporation and Delaware law could prevent a potential acquiror from buying your stock.

Anti-takeover provisions of Delaware law, in our certificate of incorporation and equity benefit plans may make a change in control of our company more difficult, even if a change in control would be beneficial to our stockholders. These provisions may allow our board of directors to prevent or make changes in the management and control of our company. In particular, our board of directors will be able to issue up to 5,000,000 shares of preferred stock with rights and privileges that might be senior to our common stock, without the consent of the holders of the common stock. Further, without any further vote or action on the part of the stockholders, the board of directors will have the authority to determine the price, rights, preferences, privileges and restrictions of the preferred stock. This preferred stock, if it is ever issued, may have preference over and harm the rights of the holders of common stock. Although the issuance of this preferred stock will provide us with flexibility in connection with possible acquisitions and other corporate purposes, this issuance may make it more difficult for a third party to acquire a majority of our outstanding voting stock. Similarly, our authorized but unissued common stock is available for future issuance without stockholder approval.

In addition, our certificate of incorporation:

- states that stockholders may not act by written consent but only at a stockholders' meeting;
- establishes advance notice requirements for nominations for election to the board of directors or proposing matters that can be acted upon at stockholders' meetings; or
- limits who may call a special meeting of stockholders.

Our stock price may be volatile, which could result in substantial losses for investors.

Volatility in the biotechnology market could cause you to incur substantial losses. An active public market for our common stock may not be sustained and the market price of our common stock may become highly volatile. The market prices of securities of biotechnology companies are currently highly volatile. The market price of our common stock may fluctuate significantly in response to the following factors, some of which are beyond our control:

- changes in market valuations of similar companies;
- announcements by us or our competitors of new or enhanced products, technologies or services or significant contracts, acquisitions, strategic relationships, joint ventures or capital commitments;
- regulatory developments;
- additions or departures of key personnel;
- deviations in our results of operations from the estimates of securities analysts; and
- future sales of our common stock or other securities.

Insiders have substantial control over Sangamo and could delay or prevent a change in corporate control.

The interest of management could conflict with the interest of our other stockholders. Our executive officers, directors and principal stockholders beneficially own, in the aggregate, approximately 68 percent of our outstanding common stock. As a result, these stockholders, if they choose to act together, will be able to exercise control over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This could have the effect of delaying or preventing a change of control of Sangamo, which in turn could reduce the market price of our stock.

USE OF PROCEEDS

We will not receive any of the proceeds from this offering. All of the net proceeds from this offering will be for the account of the selling stockholders.

DIVIDEND POLICY

We have never paid cash dividends on our common stock. We currently anticipate retaining all available funds, if any, to finance internal growth and product development. Payment of dividends in the future will depend upon our earnings and financial condition and such other factors as our board of directors may consider or deem appropriate at the time.

THE SELLING STOCKHOLDERS

The following table sets forth certain information regarding the shares beneficially owned by the selling stockholders named below as of July 31, 2001. We calculated beneficial ownership according to Rule 13d-3 of the Securities Exchange Act as of this date.

The selling stockholders may from time to time offer and sell any or all of their shares as listed below. Because the selling stockholders are not obligated to sell their shares, and because they may also acquire publicly traded shares of our common stock, we cannot estimate how many shares each selling stockholder will beneficially own after this offering. We may update, amend or supplement this prospectus from time to time to update the disclosure in this section.

All of these shares were acquired by the selling stockholders in connection with our acquisition of Gendaq Limited. Other than as a result of the acquisition, none of the selling stockholders has, or within the last three years, had any position, office or other material relationship with Sangamo or any of its affiliates. As used in this prospectus, "Selling Stockholders" includes any pledgee, donee, transferees or others who may later hold the selling stockholders' interests.

Name	Number of Shares Beneficially Owned	Percent of Outstanding Shares	Number of Shares Registered for Sale Hereby(1)
RBC Trustees (Guernsey)	113,969	*	113,969
Medical Research Council	165,255	*	165,255
Dr. Timothy Brears	113,969	*	113,969
Professor Sir Aaron Klug	34,190	*	34,190
UK Medical Ventures Fund No. 1 L.P.	591,951	2.4	591,951
ABN Amro Ventures B.V.	491,246	2.0	491,246
Philip Goelet	30,703	*	30,703
Christopher Goelet	15,351	*	15,351
Frank Bonsal	15,352	*	15,352
3i Group plc	368,434	1.5	368,434
Avlar BioVentures Fund I L.P.	122,812	*	122,812
Neomed Innovation ASA	61,406	*	61,406
Total	2,124,638		2,124,638

* Represents beneficial ownership of less than 1%.

(1) This registration statement also shall cover any additional shares of common stock which become issuable in connection with the shares registered for sale hereby by reason of any stock dividend, stock split, recapitalization or other transaction effected without the receipt of consideration which results in an increase of Sangamo's outstanding shares of common stock.

Sangamo is registering all 2,124,638 shares on behalf of certain selling stockholders. All of the shares were issued by us in connection with our acquisition of Gendaq Limited. Sangamo will receive no proceeds from this offering. The Selling Stockholders named in the table below or pledgees, donees, transferees or other successors-in-interest selling shares received from a named selling stockholder as a gift, partnership distribution or other non-sale related transfer after the date of this prospectus (collectively, the "Selling Stockholders") may sell the shares from time to time. The Selling Stockholders will act independently of Sangamo in making decisions with respect to the timing, manner and size of each sale. The sales may be made on one or more exchanges or in the over-the-counter market or otherwise, at prices and at terms then prevailing or at prices related to the then current market price, or in negotiated transactions. The Selling Stockholders may effect such transactions by selling the shares to or through broker-dealers. The shares may be sold by one or more of, or a combination of, the following:

- a block trade in which the broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by such broker-dealer for its account pursuant to this prospectus;
- an exchange distribution in accordance with the rules of such exchange;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers; and
- in privately negotiated transactions.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. In effecting sales, broker-dealers engaged by the Selling Stockholders may arrange for other broker-dealers to participate in the resales.

The Selling Stockholders may enter into hedging transactions with broker-dealers in connection with distributions of the shares or otherwise. In such transactions, broker-dealers may engage in short sales of the shares in the course of hedging the positions they assume with Selling Stockholders. The Selling Stockholders also may sell shares short and redeliver the shares to close out such short positions. The Selling Stockholders may enter into option or other transactions with broker-dealers which require the delivery to the broker-dealer of the shares. The broker-dealer may then resell or otherwise transfer such shares pursuant to this prospectus. The Selling Stockholders also may loan or pledge the shares to a broker-dealer. The broker-dealer may sell the shares so loaned, or upon a default the broker-dealer may sell the pledged shares pursuant to this prospectus.

Broker-dealers or agents may receive compensation in the form of commissions, discounts or concessions from Selling Stockholders. Broker-dealers or agents may also receive compensation from the purchasers of the shares for whom they act as agents or to whom they sell as principals, or both. Compensation as to a particular broker-dealer might be in excess of customary commissions and will be in amounts to be negotiated in connection with the sale. Broker-dealers or agents and any other participating broker-dealers or the Selling Stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act in connection with sales of the shares. Accordingly, any such commission, discount or concession received by them and any profit on the resale of the shares purchased by them may be deemed to be underwriting discounts or commissions under the Securities Act. Because Selling Stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, the Selling Stockholders will be subject to the prospectus delivery requirements of the Securities Act. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 promulgated under the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus. The Selling Stockholders have advised Sangamo that they have not

entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities. There is no underwriter or coordinating broker acting in connection with the proposed sale of shares by Selling Stockholders.

The shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of such distribution. In addition, each Selling Stockholder will be subject to applicable provisions of the Exchange Act and the associated rules and regulations under the Exchange Act, including Regulation M, which provisions may limit the timing of purchases and sales of shares of our common stock by the Selling Stockholders. Sangamo will make copies of this prospectus available to the Selling Stockholders and has informed them of the need for delivery of copies of this prospectus to purchasers at or prior to the time of any sale of the shares.

Sangamo will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act upon being notified by a Selling Stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer. Such supplement will disclose:

- the name of each such Selling Stockholder and of the participating broker-dealer(s),
- the number of shares involved,
- the price at which such shares were sold,
- the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable,
- that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and
- other facts material to the transaction.

In addition, upon being notified by a Selling Stockholder that a donee or pledgee intends to sell more than 500 shares, Sangamo will file a supplement to this prospectus.

Pursuant to the registration rights agreement, we agreed to use reasonable efforts to effect the registration of the shares in this offering and to permit the resale of such shares in accordance with the stockholders' intended method or methods. The registration rights agreement obligates us to pay all expenses incurred in connection with registration, including, without limitation, all listing fees, all fees and expenses of complying with securities or blue sky laws, all word processing, duplicating and printing expenses, messenger and delivery expenses, and the fees and disbursements of counsel for us and of our independent public accountants. However, each selling stockholder will be responsible for its own selling expense (including, without limitation, any broker's fees or commissions). We agreed in the registration rights agreement to indemnify the selling stockholders against certain liabilities, including liabilities under the Securities Act.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus contain forward-looking statements. These forward-looking statements are based on our current expectations, estimates

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and projections about our industry, management's beliefs and certain assumptions made by us. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," "may," "will" and variations of these words or similar expressions are intended to identify forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore, our actual results could differ materially and adversely from those expressed or forecasted in any forward-looking statements as a result of a variety of factors, including those set forth in "Risk Factors" above and elsewhere in, or incorporated by reference into, this prospectus. We undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

LEGAL MATTERS

The validity of the issuance of the shares in this offering will be passed upon for Sangamo BioSciences, Inc. by Brobeck, Phleger & Harrison LLP, San Francisco, California. As of October 1, 2001, members and employees of Brobeck, Phleger & Harrison LLP beneficially owned a total of 413,996 shares of our common stock and warrants to purchase 25,364 shares of common stock.

EXPERTS

Ernst & Young LLP, independent auditors, have audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2000, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration

statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

The financial statements of Gendaq Limited incorporated by reference in this prospectus from Sangamo's Report on Form 8-K/A dated August 17, 2001 for the years ended December 31, 1999 and 2000 have been audited by Arthur Andersen, independent auditors, as stated in their report which is incorporated herein by reference and have been incorporated in reliance upon the report of such firm given their authority as experts in accounting and auditing in giving such reports.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document we file at the public reference facilities of the SEC located at 450 Fifth Street N.W., Washington D.C. 20549. You may obtain information on the operation of the SEC's public reference facilities by calling the SEC at 1-800-SEC-0330. You can also access copies of such material electronically on the SEC's home page on the World Wide Web at <http://www.sec.gov>. Information concerning us is also available for inspection at the offices of the Nasdaq National Market, Reports Section, 1735 K Street, N.W., Washington, D.C. 20006.

The SEC permits us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information we file with the SEC after the date of this prospectus will automatically update and supersede this information. We incorporate by reference the following documents filed by us with the SEC (File No. 0-027430). We also incorporate by reference any future filings made with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, (the "34 Act") after the date of this prospectus until the termination of this offering.

Our annual report on Form 10-K for the fiscal year ended December 31, 2000.

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Our quarterly reports on Form 10-Q for the periods ended March 31, 2001 and June 30, 2001.

Our current reports on Form 8-K filed July 17, 2001 and Form 8-K/A filed August 17, 2001, respectively.

Our registration statement on Form 8-A, relating to our common stock (File No. 0-30171) pursuant to Section 12 of the '34 Act in which there is described the terms, rights and provisions applicable to our outstanding common stock.

If you request orally or in writing a copy of any or all of the documents incorporated by reference, then we will send to you the copies you requested at no charge. However, we will not send exhibits to such documents, unless such exhibits are specifically incorporated by reference in such documents. You should direct requests for such copies to Senior Director of Finance, 501 Canal Boulevard, Richmond, California 94804, (510) 970-6000.

To the extent information in any document which is filed after the date of this prospectus supercedes or amends any information included in or incorporated by reference in this prospectus, you should only rely on the information as so superceded or amended.

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PROSPECTUS

2,124,638 Shares



SANGAMO BIOSCIENCES, INC.
Common Stock

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No dealer, salesperson or other individual has been authorized to give any information or make any representations not contained in this prospectus in connection with the offering covered by this prospectus. If given or made, such information or representations must not be relied upon as having been authorized by us or the selling stockholders. This prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, the common stock in any jurisdiction where, or to any person to whom, it is unlawful to make such offer or solicitation. Neither the delivery of this prospectus nor any sale of the offered shares shall, under any circumstances, create any implication that there has not been any change in the facts of the offered shares set forth in this prospectus or in the affairs of Sangamo BioSciences, Inc. since the date of the prospectus.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, payable by us in connection with the sale of common stock being registered. All amounts are estimates except the SEC registration fee.

SEC Registration fee	\$ 6,737.76
NASD fee	—
Nasdaq National Market listing fee	—
Printing and engraving	2,000
Our legal fees and expenses	10,000
The selling stockholders' legal fees and expenses	—
Accounting fees and expenses	10,000
Blue sky fees and expenses	—
Transfer agent fees	500
Miscellaneous	—
Total	\$ 29,237.76

Item 15. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a court to award or a corporation's board of directors to grant indemnification to directors and officers in terms sufficiently broad to permit the indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended (the "Securities Act"). Article VII, Section 6 of Registrant's bylaws provides for mandatory indemnification of its directors and officers and permissible indemnification of employees and other agents to the maximum extent permitted by the Delaware General Corporation Law. Registrant's certificate of incorporation provides that, subject to Delaware law, its directors will not be personally liable for monetary damages for breach of the a director's fiduciary duty as directors to Registrant and its stockholders. This provision in the certificate of incorporation does not eliminate a director's fiduciary duty, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to Registrant or its stockholders for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock purchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws. Registrant has entered into indemnification agreements with its officers and directors. The indemnification agreements provide Registrant's officers and directors with further indemnification to the maximum extent permitted by the Delaware General Corporation Law.

Item 16. Exhibits

Exhibit No.	Description
2.1(1) —	Agreement for the Sale and Purchase of all the Issued Share Capital of Gendaq Limited
5.1* —	Opinion of Brobeck, Phleger & Harrison LLP
23.1 —	Consent of Ernst & Young LLP
23.2 —	Consent of Arthur Andersen LLP

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23.3* —	Consent of Brobeck, Phleger & Harrison LLP (included in Exhibit 5.1)
24.1* —	Power of Attorney (see signature page)

(1) Incorporated by reference to Exhibit 2.1 filed with our Report on Form 8-K dated July 17, 2001, and amended on August 17, 2001.

* Previously filed

Item 17. Undertakings

The undersigned Registrant hereby undertakes:

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement: (i) to include any prospectus required by section 10(a)(3) of the Securities Act of 1933; (ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and (iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement; provided, however, that (i) and (ii) do not apply if the Registration Statement is on Form S-3 or Form S-8, and the information required to be included in a post-effective amendment by (i) and (ii) is contained in periodic reports filed by the Registrant pursuant to Section 13 or Section 15 of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

2. That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

3. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event

that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

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SIGNATURES

Pursuant to the requirements of the Securities Act, Sangamo BioSciences, Inc. certifies that it has reasonable ground to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Amendment No. 1 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Richmond, State of California, on this 17th day of October, 2001.

SANGAMO BIOSCIENCES, INC.

By: /s/ EDWARD O. LANPHIER II

Edward O. Lanphier II
President, Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

Signatures	Title	Date
/s/ EDWARD O. LANPHIER _____ Edward O. Lanphier II	President, Chief Executive Officer and Director (Principal Executive Officer)	October 17, 2001
* _____ Shawn K. Johnson	Senior Director of Finance (Principal Financial and Accounting Officer)	October 17, 2001
* _____ Herbert W. Boyer, Ph.D.	Director	October 17, 2001
* _____ William G. Gerber	Director	October 17, 2001
* _____ Jon E.M. Jacoby	Director	October 17, 2001
* _____ John W. Larson	Director	October 17, 2001

Stephan Reeders

*

Director

October 17, 2001

William J. Rutter, Ph.D.

*

Director

October 17, 2001

Michael C. Wood

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EXHIBIT 23.1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" in Amendment No. 1 to the Registration Statement (Form S-3 No. 333-68066) and related Prospectus of Sangamo BioSciences, Inc. for the registration of 2,124,638 shares of its common stock and to the incorporation by reference therein of our report dated January 26, 2001, with respect to the financial statements and schedules of Sangamo BioSciences, Inc. included in its Annual Report on (Form 10-K) for the year ended December 31, 2000, filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP

Palo Alto, California

October 17, 2001

EXHIBIT 23.2

Consent of Arthur Andersen, Independent Accountants

As independent public accountants, we hereby consent to the incorporation by reference in this registration statement of our audit report on the financial statement Gendaq Limited dated June 27, 2001 and August 9, 2001 with respect to the Cash flow statement, associated notes set forth in notes 15, 16 and 17, the post balance sheet events set out in note 19 and the US GAAP reconciliation set forth in note 22, included in Sangamo BioSciences Inc's Form 8-K/A, dated August 17, 2001, and to all references to our Firm included in this registration statement.

/s/ ARTHUR ANDERSEN

Cambridge, England

October 17, 2001

End of Filing

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