

# Summary Report

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## Triamcinolone Diacetate

### Prepared for:

Food and Drug Administration

Clinical use of bulk drug substances nominated for inclusion on the 503B Bulks List

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### Prepared by:

University of Maryland Center of Excellence in Regulatory Science and Innovation (M-CERSI)

University of Maryland School of Pharmacy

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## REVIEW OF NOMINATIONS

Triamcinolone diacetate (UNII code: A73MM2Q32P) was nominated for inclusion on the 503B Bulks List by the Specialty Sterile Pharmaceutical Society, Outsourcing Facilities Association, and US Compounding.

Triamcinolone diacetate was nominated for use in acute and subacute bursitis, acute nonspecific tenosynovitis, epicondylitis, arthritis, discoid lupus erythematosus, keloids, localized hypertrophic, inflammatory lesions of granuloma annulare, lichen planus, lichen simplex chronicus (neurodermatitis), psoriatic plaques, necrobiosis lipoidica diabetorum, severe asthma, and pain. Triamcinolone diacetate was also nominated for various general disease states such as diseases requiring anti-inflammatory or immunosuppressant effects, allergic states, dermatologic diseases, endocrine disorders, gastrointestinal disease, hematologic disorders, neoplastic diseases, nervous system, ophthalmic diseases, renal diseases, respiratory diseases, and rheumatic disorders.

Triamcinolone diacetate will be compounded in both preservative free and preserved solutions and suspensions for intramuscular, intra-articular, soft tissue, epidural, intrathecal, intra-ocular, or ophthalmic injection in strengths ranging from 5-80 mg/mL.

Reasons provided for nomination to the 503B Bulks List include:

- Prescribers and hospital formularies have different preferences or requirements for concentrations, volumes, or final product containers for administration.
- It is relatively unsafe to expose the direct compounding area to hundreds of vials or ampules and hundreds of aseptic manipulations during the compounding of a typical batch size for an outsourcing facility; compounding from bulk is more safe and efficient.
- Commercially available finished products have an inherent variance in potency creating an uncertain final concentration for the new product.
- Use of state-of-the-art equipment, like the SKAN isolator technology, requires the use of bulk starting materials.
- Triamcinolone diacetate is not available commercially anymore, it was discontinued. Even if it was available commercially, a compounded medication made from the bulk substance would be necessary to make a more concentrated injection. When injecting drugs into the epidural space, less volume is more beneficial.
- A preservative free version of triamcinolone diacetate is essential for an epidural injection. Triamcinolone diacetate is effective, safe, and long acting for epidural injection.
- Triamcinolone diacetate is useful for a variety of conditions. It is preferred for its relative potency compared to hydrocortisone and other available corticosteroids, onset and duration of action, and for its lack of mineralocorticoid activity.
- Patients respond differently and the compounded product may be the only product to effectively treat the indication for which it is intended to treat.
- A patient may need a prescribed dosage form or strength that is not commercially available.
- Possible patient sensitivities to manufactured product dyes, fillers, preservatives and other excipients.
- Manufacturer backorders.

## METHODOLOGY

### *Background information*

The national medicine registers of 13 countries and regions were searched to establish the availability of triamcinolone diacetate products in the United States (US) and around the world. The World Health Organization, the European Medicines Agency (EMA), and globalEDGE were used to identify regulatory agencies in non-US countries. The medicine registers of non-US regulatory agencies were selected for inclusion if they met the following criteria: freely accessible; able to search and retrieve results in English language; and desired information, specifically, product trade name, active ingredient, strength, form, route of administration (ROA), and approval status, provided in a useable format. Based on these criteria, the medicine registers of 13 countries/regions were searched: US, Canada, European Union (EU), United Kingdom (UK), Ireland, Belgium, Latvia, Australia, New Zealand, Saudi Arabia, Abu Dhabi, Hong Kong, and Namibia. Both the EMA and the national registers of select EU countries (Ireland, UK, Belgium, and Latvia) were searched because some medicines were authorized for use in the EU and not available in a member country and vice versa.

Each medicine register was searched for triamcinolone diacetate; name variations of triamcinolone diacetate were entered if the initial search retrieved no results. The following information from the search results of each register was recorded in a spreadsheet: product trade name; active ingredient; strength; form; ROA; status and/or schedule; approval date. Information was recorded only for products with strengths, forms, and/or ROA similar to those requested in the nominations.

In addition to the aforementioned medicine registers, the DrugBank database (version 5.1.4) and the Natural Medicines database were searched for availability of over-the-counter (OTC) products containing triamcinolone diacetate. The availability of OTC products (yes/no) in the US and the ROA of these products were recorded in a spreadsheet. Individual product information was not recorded.

### *Systematic literature review*

#### Search strategy

Two databases (PubMed and Embase) were searched including any date through May 5, 2019. The search included a combination of ("triamcinolone diacetate") AND (intrathecal OR intraocular OR ophth\* OR epidural OR "soft tissue" OR intraarticular OR intramuscular) AND (treat\*[TIAB] OR therap\*[TIAB] OR clinic\*[TIAB] OR asthma[TIAB] OR pain[TIAB]) AND ("humans"[MeSH Terms] AND English[lang]) NOT autism. Peer-reviewed articles as well as grey literature were included in the search. Search results from each database were exported to Covidence®, merged, and sorted for removal of duplicate citations.

#### Study selection

Literature reviews and/or meta-analyses, cost-effectiveness, and epidemiological studies were excluded. Triamcinolone diacetate is a component of an FDA-approved product that has been discontinued by the manufacturer, not for safety or efficacy reasons. As a result, articles were excluded if triamcinolone diacetate was utilized as the FDA-approved product or in the same concentration and formulation as the FDA-approved product. Additional exclusion criteria includes any dosage form/ROA that differed from the nominated dosage form/ROA. Articles were considered relevant based on the identification of a clinical use of triamcinolone diacetate or the implementation of triamcinolone diacetate in clinical practice. Articles were excluded if not in

English, a clinical use was not identified, incorrect salt form, or if the study was not conducted in humans. Screening of all titles, abstracts, and full-text were conducted independently by two reviewers. All screening disagreements were reconciled by a third reviewer.

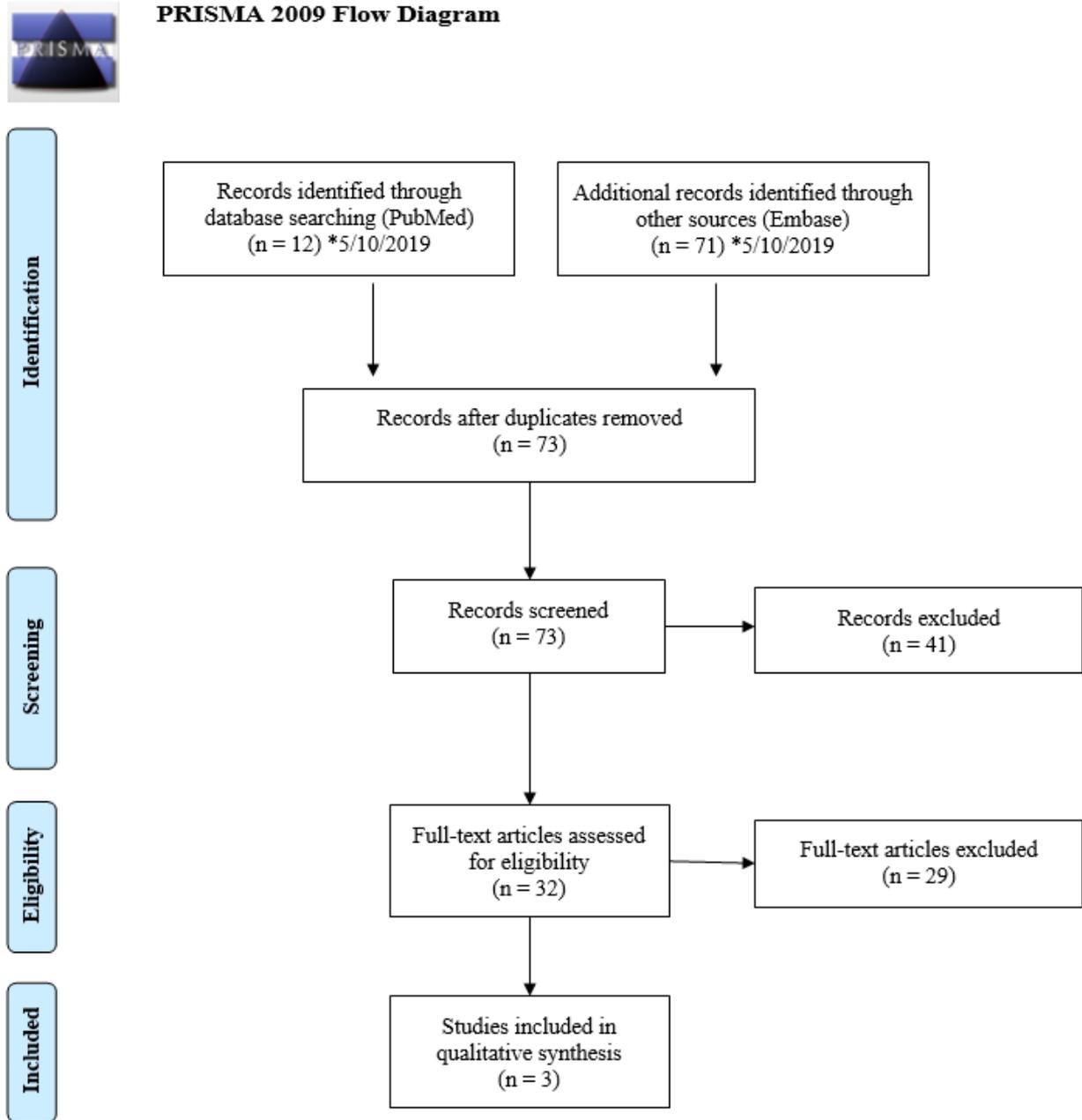
### Data extraction

A standard data extraction form was used to collect study authors; article title; year published; journal title; country; indication for triamcinolone diacetate use; dose; strength; dosage form; ROA; frequency and duration of therapy; any combination therapy utilized; if applicable, formulation of compounded products; study design; and any discussion surrounding the use of triamcinolone diacetate compared to alternative therapies.

### Results

Please refer to Figure 1.

Figure 1. Summary of literature screening and selection (PRISMA 2009 Flow Diagram)



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit [www.prisma-statement.org](http://www.prisma-statement.org).

### *Outreach to medical specialists and specialty organizations*

Using the indications from the nominations and the results of the literature review, 11 medical specialties that would potentially use triamcinolone diacetate were identified: allergy and immunology, dermatology, endocrinology, gastroenterology, hematology, nephrology, neurology, ophthalmology, primary care, pulmonology, and rheumatology. Semi-structured interviews were conducted with subject matter experts within these specialties. Interviews lasted from 30-75 minutes and were conducted either via telephone or in-person. Criteria for selecting subject matter experts included recommendations provided by specialty professional associations, convenient geographic location, authorship within the specialty, or referral by an interviewee. Up to nine (9) interviews were conducted per substance. To determine if a formal interview was warranted, a medical expert in gastroenterology was provided the list of substances pertinent to their specialty via email. The gastroenterologist replied that triamcinolone diacetate is rarely ever used. Three (3) experts were contacted for interviews, of which two (2) accepted and zero (0) declined interviews. One (1) medical expert specializing in neurology failed to respond to the interview request. The interviews were recorded and transcribed via ©Rev.com. QSR International's NVivo 12 software was utilized for qualitative data analysis. The University of Maryland, Baltimore IRB and the Food & Drug Administration RIHSC reviewed the study and found it to be exempt. Subject matter experts provided their oral informed consent to participate in interviews.

### *Survey*

General professional medical associations and specialty associations for allergy and immunology, dermatology, endocrinology, gastroenterology, hematology, nephrology, neurology, ophthalmology, primary care, pulmonology, and rheumatology, identified from the nominations, literature review, and interviews, were contacted to facilitate distribution of an online survey. A Google™ search was conducted to identify relevant professional associations within each specialty. Associations were included if their members are predominantly practitioners, national associations, and organizations focused on practice within the US. Organizations without practicing physicians and state or regional organizations were excluded. The association's website was searched in order to identify the email of the executive director, regulatory director, media director, association president, board members, or other key leaders within the organization to discuss survey participation. If no contact information was available, the "contact us" tab on the association website was used.

An online survey was created using Qualtrics® software (Provo, UT). The survey link was distributed to 20 associations. If an association had more than one (1) substance with indications relevant to that specialty, substances were combined into one (1) survey with no more than 14 substances per survey. Table 1 highlights the associations that agreed to distribute the survey link and Table 2 includes the associations that declined to participate. Additionally, single substance surveys were created and posted on the project website which was shared with survey participants.

Participation was anonymous and voluntary. The estimated time for completion was 30 minutes with a target of 50 responses per survey. The Office of Management and Budget (OMB) approved this project.

Table 1. Participating associations

<b>Specialty</b>	<b>Association</b>
Allergy/Immunology	American Academy of Allergy, Asthma and Immunology (AAAI)
Dermatology	American Academy of Dermatology (AAD)
	American Society for Dermatologic Surgery (ASDS)
Nephrology	Renal Physicians Association (RPA)
Ophthalmology	American Academy of Ophthalmology (AAO)
	American Society of Cataract and Refractive Surgery (ASCRS)
	American Society of Retina Specialist (ASRS)
Primary Care	American Academy of Environmental Medicine (AAEM)
Rheumatology	American College of Rheumatology (ACR)

Table 2. Associations that declined participation

<b>Specialty</b>	<b>Association</b>	<b>Reasons for Declining</b>
Allergy/Immunology	American College of Allergy, Asthma & Immunology (ACAAI)	Declined, “unaware of any bulk drug substances used by allergies in their practices”
Endocrinology	American Association of Clinical Endocrinologists (AACE)	Declined, “Endocrinologists are not generally in the compounding space.”
Gastroenterology	American Gastroenterological Association (AGA)	Failed to respond
Hematology	American Society of Hematology (ASM)	Failed to respond
Medicine	American Medical Association (AMA)	Failed to respond
	American Osteopathic Association (AOA)	Failed to respond
Nephrology	American Society of Nephrology (ASN)	Failed to respond
Neurology	American Academy of Neurology (AAN)	Failed to respond
Primary Care	American Academy of Family Physicians (AAFP)	Failed to respond
	American College of Physicians (ACP)	Failed to respond
Pulmonology	American Thoracic Society (ATS)	Failed to respond

## CURRENT AND HISTORIC USE

### *Summary of background information*

- Triamcinolone diacetate is not currently available as an FDA-approved product. Triamcinolone diacetate was available as a 25mg/mL and 40mg/mL injection, but these products have been discontinued, not for safety or efficacy reasons.
- Triamcinolone diacetate is not available as an OTC product in the US.
- There is a current United States Pharmacopeia (USP) monograph for triamcinolone diacetate.
- Triamcinolone diacetate is not available in any of the foreign medicine registries searched.

Table 3. Currently approved products – US

*No approved products in the US*

Table 4. Currently approved products – select non-US countries and regions

*No approved products in the selected non-US countries and regions*

### *Summary of literature review*

- Total number of studies included: 3 studies (1 descriptive and 2 experimental).
- Most of the studies were from the US (2).
- There was not a most common indication for the use of triamcinolone diacetate in the US or non-US studies. In the US studies, acute asthma and reactive lymphoid hyperplasia were found as indications. In the non-US studies, chalazia was the only indication found.
- No compounded products were identified from any studies.

Table 5. Types of studies

<b>Types of Articles</b>	<b>Number of Studies</b>
Descriptive <sup>1</sup>	1
Experimental <sup>2,3</sup>	2
Observational	0

Table 6. Number of studies by country

Country	Number of Studies
Israel <sup>3</sup>	1
US <sup>1,2</sup>	2
Total US: 2 Total Non-US Countries: 1	

Table 7. Number of studies by combinations

*No combination products were nominated*

Table 8. Dosage by indication – US

Indication	Dose	Concentration	Dosage Form	ROA	Duration of Treatment
Acute Asthma <sup>2</sup>	40mg	–	–	Intramuscular	Once
Reactive Lymphoid Hyperplasia <sup>1</sup>	40mg	–	Injection	–	–

Abbreviations: “–”, not mentioned; ROA, route of administration.

Table 9. Dosage by indication – non-US countries

Indication	Dose	Concentration	Dosage Form	ROA	Duration of Treatment
Chalazia <sup>3</sup>	0.1-0.3mL	40mg/mL	Injection	Intralesional	Once-Twice

Abbreviation: ROA, route of administration.

Table 10. Compounded products – US

*No compounded products from reported studies*

Table 11. Compounded products – non-US countries

*No compounded products from reported studies*

*Summary of focus groups/interviews of medical experts and specialty organizations*

Two (2) interviews were conducted. One (1) medical expert in gastroenterology was provided the list of substances pertinent to their specialty via email. The gastroenterologist replied that, triamcinolone diacetate is “an older agent for the treatment of inflammatory bowel, it is now rarely if ever used for this indication (it’s use has been supplanted by newer agents like Budenonide [*sic*]).” One (1) medical expert in neurology failed to respond to the interview request.

Table 12. Overview of interviewees

<b>Interviewee</b>	<b>Level of Training</b>	<b>Specialty</b>	<b>Current Practice Setting</b>	<b>Experience with Triamcinolone diacetate</b>	<b>Interview Summary Response</b>
END_03	MD	Endocrinology, Diabetes and Metabolism	Academic medical institution	No	<ul style="list-style-type: none"> <li>• Does not use this substance</li> </ul>
OPH_05	MD	Ophthalmology (retina specialist)	Academic medical institution	Not specified <sup>a</sup>	<ul style="list-style-type: none"> <li>• As a topical steroid, it can cause pressure rise and cataracts.</li> <li>• Interviewee does not see the need for another topical steroid that has the same issues as the available ones.</li> </ul>

Abbreviation: MD, Doctor of Medicine.

<sup>a</sup>Interviewee mentioned use of intravitreal triamcinolone but does not mention if this is specifically triamcinolone diacetate.

*Summary of survey results*

Table 13. Characteristics of survey respondents [112 people responded to survey<sup>a</sup>]

<b>Board Certification</b>	<b>DO</b>	<b>MD</b>	<b>No Response</b>
Allergy and Immunology	0	1	0
Cardiovascular Disease	0	0	1
Dermatology	0	3	0
Internal Medicine	0	2	0
Ophthalmology	0	59	0
Pediatric Dermatology	0	1	0
Rheumatology	1	0	0
No Board Certification	0	1	0
No Response	0	0	46

Abbreviations: DO, Doctor of Osteopathic Medicine; MD, Doctor of Medicine.

<sup>a</sup>Some respondents reported more than one (1) terminal clinical degree or board certification.

Table 14. Types of products used, prescribed, or recommended

<b>Types of Products</b>	<b>Respondents, n (N=55<sup>a</sup>)</b>
Compounded	7 <sup>b</sup>
FDA-approved	30
Over-the-counter	0
Dietary	0
Unsure	3
No Response	20

<sup>a</sup>Out of 112 respondents, 55 reported using, prescribing, or recommending multiple types of triamcinolone diacetate product.

<sup>b</sup>One (1) respondent used in combination: “Trimoxi from Imprimis”

Table 15. Compounded use of triamcinolone diacetate in practice<sup>a</sup>

<b>Indication</b>	<b>Strength<sup>b</sup></b>	<b>Dosing frequency<sup>b</sup></b>	<b>Dosage Form</b>	<b>ROA</b>	<b>Duration of Treatment<sup>b</sup></b>	<b>Patient Population<sup>b</sup></b>
Cataract surgery <sup>c</sup>	“Unsure”	During cataract surgery	Drops	Intracameral, ophthalmic	For surgery	“In cataract surgery to ID vitreous”
Intraocular use	–	–	–	Intracameral	–	–
Ocular disease	–	–	–	–	–	–
Ocular inflammation	4 mg	“Q3-6m”	Suspension	Intravitreal	“3-6m”	“[Uveitis]”
Retinal swelling						Diabetics

Abbreviations: “–”, not mentioned; ROA, route of administration.

<sup>a</sup>Six (6) respondents.

<sup>b</sup>Quotations are direct words from respondents.

<sup>c</sup>Includes controlling postoperative inflammation after cataract surgery.

Table 16. Indications for which triamcinolone diacetate is considered a standard therapy<sup>a</sup>

Indication	Standard Therapy			
	Compounded, n (N=7)	Non-compounded, n (N=25)	Unsure, n (N=3)	No Response, n (N=20)
Cataract surgery <sup>b</sup>	2	2	0	0
Chalazia	0	3	0	0
Cystoid macular edema	0	3	1	0
Eczema	0	1	0	0
Identifying the vitreous	1	1	0	0
Inflammation <sup>c</sup>	1	15	3	0
Macular edema	1	7	0	0
Ocular disease	1	0	0	0
Post-surgical after keratoplasty	0	1	0	0
Psoriasis	0	1	0	0
Retinal vein occlusions	0	1	0	0
Seborrheic dermatitis	0	1	0	0
Other <sup>d</sup>	1	0	0	0
None	0	1	0	0
No Response	1	0	0	20

<sup>a</sup>Some respondents reported more than one indication.

<sup>b</sup>Includes vitreous loss during cataract surgery, staining vitreous for posterior capsule rupture in cataract surgery, vitrectomy with cataract surgery, in broken posterior capsule.

<sup>c</sup>Includes cheilitis, iritis, post-operative inflammation (prophylaxis), ocular inflammation, and uveitis.

<sup>d</sup>One (1) respondent stated, “intravitreal injections where non-preserved triamcinolone is necessary.”

Table 17. Reasons for using compounded product instead of the FDA-approved products

<b>Theme</b>	<b>Reasons</b>
Availability	<ul style="list-style-type: none"> <li>• “FDA approved med is back ordered”</li> <li>• “[A] lower concentration”</li> <li>• “There [isn’t] a combination antibiotic/steroid injection approved for intraocular use”</li> </ul>
Cost	<ul style="list-style-type: none"> <li>• “FDA approved med is back ordered and also more expensive”</li> <li>• “Cheaper”</li> <li>• “Price”</li> </ul>
Preservative-free	<ul style="list-style-type: none"> <li>• “Particulate size, cost, preservative free”</li> <li>• “Compounded can be produced without preservatives”</li> </ul>

Table 18. Change in frequency of compounded triamcinolone diacetate usage over the past 5 years

	<b>Respondents, n (N=7)</b>
No—use has remained consistent	4
Yes—I use it LESS often now <ul style="list-style-type: none"> <li>• “Less availability”</li> </ul>	1
Yes—I use it MORE often now <ul style="list-style-type: none"> <li>• “Moving to dropless regimens”</li> <li>• “It helps with visualization”</li> </ul>	2

Table 19. Do you stock non-patient specific compounded triamcinolone diacetate in your practice?

	<b>Respondents, n (N=7)</b>
No	5
Yes	2

Table 20. Questions related to stocking non-patient specific compounded triamcinolone diacetate

	Respondents, n (N=2)
<b>In what practice locations do you stock non-patient-specific compounded triamcinolone diacetate?</b>	
Private practice physician office	1
Outpatient clinic	0
Emergency room	0
Operating room	1
Inpatient ward	0
<b>How do you obtain your stock of non-patient-specific compounded triamcinolone diacetate?</b>	
Purchase, or have a patient purchase, from a traditional or 503a compounding pharmacy	2
Purchase, or have a patient purchase, from a 503b outsourcing facility	0
Compound the product yourself	0
Have the product compounded by an in-house pharmacy	0
<b>Why do you keep a stock of non-patient-specific compounded triamcinolone diacetate?</b>	
Convenience	1
Emergencies	0
Other (“routine use”)	1

## CONCLUSION

Triamcinolone diacetate (UNII code: A73MM2Q32P) was nominated for inclusion on the 503B Bulks List for a wide variety of disease states. The nominated formulations include preservative free and preserved solutions or suspensions for intramuscular, intra-articular, soft tissue, epidural, intrathecal, intra-ocular, or ophthalmic use. Triamcinolone diacetate is not available as an FDA-approved product or in any of the foreign medicine registries searched. In the US, the previously available triamcinolone diacetate injection was discontinued, but not for safety or efficacy reasons.

From the literature review, most of the studies were from the US. There was not a most common indication for the use of triamcinolone diacetate. In the US studies, acute asthma and reactive lymphoid hyperplasia were found as indications. In the non-US studies, chalazia was the only indication found. No compounded products were identified from any studies.

From the interviews, one (1) interviewee did not use triamcinolone diacetate. The other interviewee did not see the need for another topical steroid that has the same issues of pressure rise and cataracts as the available ones.

From the survey responses, 55 out of 112 respondents used triamcinolone diacetate. Seven (7) of these respondents reported using compounded triamcinolone diacetate. The most common indication respondents used compounded triamcinolone diacetate for was during cataract surgery. Availability, cost, and avoiding preservatives were the reasons for using the compounded triamcinolone diacetate product over an FDA-approved one. Two (2) respondents reported stocking compounded triamcinolone diacetate in the physician office and operating room. Both respondents purchase, or have a patient purchase, from a traditional or 503a compounding pharmacy. One (1) reported stocking for convenience and the other for routine use.

## APPENDICES

### *Appendix 1. References*

1. Desroches G, Abrams GW, Gass JDM. Reactive lymphoid hyperplasia of the uvea. A case with ultrasonographic and computed tomographic studies. *Arch Ophthalmol.* 1983;101:725-728.
2. Schuckman H, DeJulius DP, Blanda M, Gerson LW, DeJulius AJ, Rajaratman M. Comparison of intramuscular triamcinolone and oral prednisone in the outpatient treatment of acute asthma: A randomized controlled trial. *Ann Emerg Med.* 1998;31(3):333-338. doi:10.1016/S0196-0644(98)70343-9
3. Vidaurri LJ, Peter J. Intralesional corticosteroid treatment of chalazia. *Ann Ophthalmol.* 1986;18(12):339-340.

## Appendix 2. Survey instrument

### Start of Block: Welcome Page

The University of Maryland Center of Excellence in Regulatory Science and Innovation (M-CERSI), in collaboration with the Food and Drug Administration (FDA), is conducting research regarding the use of certain bulk drug substances nominated for use in compounding by outsourcing facilities under section 503B of the Federal Food, Drug, and Cosmetic Act. In particular, we are interested in the current and historic use of these substances in clinical practice. This survey is for **triamcinolone diacetate**. As a medical expert, we appreciate your input regarding the use of this substance in your clinical practice. This information will assist FDA in its development of a list of bulk drug substances that outsourcing facilities can use in compounding under section 503B of the Act. All responses are anonymous.

OMB Control No. 0910-0871

Expiration date: June 30, 2022

The time required to complete this information collection is estimated to average 30 minutes, including the time to review instructions, search existing data sources, gather the data needed, and complete and review the information collection. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. If you have additional questions or concerns about this research study, please email: [compounding@rx.umaryland.edu](mailto:compounding@rx.umaryland.edu). If you have questions about your rights as a research subject, please contact HRPO at 410-760-5037 or [hrpo@umaryland.edu](mailto:hrpo@umaryland.edu).

### End of Block: Welcome Page

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### Start of Block: Triamcinolone diacetate

Q1. What type(s) of product(s) do you use, prescribe, or recommend for **triamcinolone diacetate**? Please check all that apply.

- Compounded drug product
- FDA-approved drug product
- Over the counter drug product
- Dietary supplement (e.g. vitamin or herbal supplement products sold in retail setting)
- Unsure

*Skip To: Q13 If What type(s) of product(s) do you use, prescribe, or recommend for triamcinolone diacetate? Please check all th... != Compounded drug product*

*Skip To: Q2 If What type(s) of product(s) do you use, prescribe, or recommend for triamcinolone diacetate? Please check all th... = Compounded drug product*

---

### Display This Question:

*If What type(s) of product(s) do you use, prescribe, or recommend for triamcinolone diacetate? Please check all th... = Compounded drug product*

Q2. Please list any conditions or diseases for which you use compounded **triamcinolone diacetate** in your practice. Please include the strength(s), dosing frequency(ies), dosage form(s), route(s) of administration, duration of therapy, and patient population (ex. age, gender, comorbidities, allergies, etc).

	Strength(s) (please include units)	Dosing frequency(ies)	Dosage form(s)	Route(s) of administration	Duration of therapy	Patient population
Condition 1 (please describe)						
Condition 2 (please describe)						
Condition 3 (please describe)						
Condition 4 (please describe)						
Condition 5 (please describe)						

Q3. Do you use compounded **triamcinolone diacetate** as a single agent active ingredient, or as one active ingredient in a combination product? Please check all that apply.

- Single
- Combination

*Skip To: Q5 If Do you use compounded triamcinolone diacetate as a single agent active ingredient, or as one active ingredient... != Combination*

*Display This Question:*

*If Loop current: Do you use compounded triamcinolone diacetate as a single agent active ingredient, or as one active ingredient... = Combination*

Q4. Please list all combination products in which you use compounded **triamcinolone diacetate**.

\_\_\_\_\_

Q5. For which, if any, diseases or conditions do you consider compounded **triamcinolone diacetate** standard therapy?

\_\_\_\_\_

Q6. Does your specialty describe the use of compounded **triamcinolone diacetate** in medical practice guidelines or other resources?

\_\_\_\_\_

Q7. Over the past 5 years, has the frequency in which you have used compounded **triamcinolone diacetate** changed?

- Yes - I use it **MORE** often now (briefly describe why) \_\_\_\_\_
- Yes - I use it **LESS** often now (briefly describe why) \_\_\_\_\_

- No - use has remained consistent

Q8. Why do you use compounded **triamcinolone diacetate** instead of any FDA-approved drug product?

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Q9. Do you stock non-patient-specific compounded **triamcinolone diacetate** in your practice location?

- Yes
- No

*Skip To: End of Block If Do you stock non-patient-specific compounded triamcinolone diacetate in your practice location? = No*

*Display This Question:*

*If Do you stock non-patient-specific compounded triamcinolone diacetate in your practice location? = Yes*

Q10. In what practice location(s) do you stock non-patient-specific compounded **triamcinolone diacetate**? Please check all that apply.

- Physician office
- Outpatient clinic
- Emergency room
- Operating room
- Inpatient ward
- Other (please describe) \_\_\_\_\_

Q11. How do you obtain your stock of non-patient-specific compounded **triamcinolone diacetate**? Please check all that apply.

- Purchase from a compounding pharmacy
- Purchase from an outsourcing facility
- Compound the product yourself
- Other (please describe) \_\_\_\_\_

Q12. Why do you keep a stock of non-patient-specific compounded **triamcinolone diacetate**? Please check all that apply.

- Convenience
- Emergencies
- Other (please describe) \_\_\_\_\_

*Skip To: End of Block If Why do you keep a stock of non-patient-specific compounded triamcinolone diacetate? Please check all that apply. = Convenience*

*Skip To: End of Block If Why do you keep a stock of non-patient-specific compounded triamcinolone diacetate? Please check all that apply. = Emergencies*

*Skip To: End of Block If Why do you keep a stock of non-patient-specific compounded triamcinolone diacetate? Please check all that apply. = Other (please describe)*

Q13. For which, if any, diseases or conditions do you consider **triamcinolone diacetate** standard therapy?

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Q14. Does your specialty describe the use of **triamcinolone diacetate** in medical practice guidelines or other resources?

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**End of Block: Triamcinolone diacetate**

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**Start of Block: Background Information**

Q15. What is your terminal clinical degree? Please check all that apply.

- Doctor of Medicine (MD)
- Doctor of Osteopathic Medicine (DO)
- Doctor of Medicine in Dentistry (DMD/DDS)
- Naturopathic Doctor (ND)
- Nurse Practitioner (NP)
- Physician Assistant (PA)
- Other (please describe) \_\_\_\_\_

Q16. Which of the following Board certification(s) do you hold? Please check all that apply.

- No Board certification
- Allergy and Immunology
- Anesthesiology
- Cardiovascular Disease
- Critical Care Medicine
- Dermatology
- Emergency Medicine
- Endocrinology, Diabetes and Metabolism
- Family Medicine
- Gastroenterology
- Hematology
- Infectious Disease
- Internal Medicine
- Medical Toxicology
- Naturopathic Doctor
- Naturopathic Physician
- Nephrology
- Neurology
- Obstetrics and Gynecology
- Oncology
- Ophthalmology
- Otolaryngology
- Pain Medicine
- Pediatrics
- Psychiatry
- Rheumatology
- Sleep Medicine
- Surgery (please describe) \_\_\_\_\_
- Urology
- Other (please describe) \_\_\_\_\_

**End of Block: Background Information**