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STATE OF NEW JERSEY
DEPARTMENT OF HEALTH AND SENIOR SERVICES

IN RE: PUBLIC MEETING
MEDICINAL MARIJUANA
REVIEW PANEL

LOCATION: War Memorial
One Memorial Drive
Trenton, New Jersey 08608

DATE: October 25, 2017

TIME: 9:30 a.m.

J. H. BUEHRER & ASSOCIATES
884 BREEZY OAKS DRIVE
TOMS RIVER, NEW JERSEY 08753
(732) 295-1975

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1 BEFORE:
 2 ALEX BEKKER, M.D., Ph.D., Panel Chairman
 3 CHERYL KENNEDY, M.D., Panel Member
 4 MARY L. JOHANSEN, Ph.D., NE-BC, RN, Panel Member
 5 MARY M. BRIDGEMAN, Pharm.D, Panel Member
 6 STEPHANIE ZARUS, M.D., Panel Member
 7 PETROS LEVOUNIS, M.D., M.A., Panel Member
 8 (via telephone)
 9 ALSO PRESENT:
 10 Michele Stark, Executive Secretarial Assistant
 11 Melissa Bayly, DAG
 12 Susan Carson
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1 MS. STARK: This is a formal meeting
 2 of the Medicinal Marijuana Review Panel.
 3 Adequate notice of this meeting has been
 4 published in accordance with the provisions of
 5 Chapter 231, Public Law 1975-C10 -- I mean,
 6 sorry, C-10:4.10 of the State of New Jersey
 7 entitled Open Public Meetings Act. Notice was
 8 sent to the Secretary of State who posted the
 9 notice in a public place. Notices were
 10 published in two newspapers, the Star Ledger and
 11 the Courier Post and forwarded to the press
 12 covering the State House.
 13 Now, do roll. Dr. Berkowitz is not
 14 here. Dr. Bridgeman?
 15 DR. BRIDGEMAN: Here.
 16 MS. STARK: Dr. Bekker?
 17 DR. BEKKER: Here.
 18 MS. STARK: Dr. Johansen?
 19 DR. JOHANSEN: Here.
 20 MS. STARK: Dr. Kennedy?
 21 DR. KENNEDY: Right here.
 22 MS. STARK: Dr. Levounis will be
 23 participating by phone later on. Dr. Scerbo is
 24 absent, and Dr. Zarus?
 25 DR. ZARUS: Here.

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1 MS. STARK: We have five members of
 2 the board present, which is a quorum.
 3 DR. BEKKER: So we are going to
 4 review and approve the minutes from our last
 5 meeting. The minutes of 5/11/17 have been
 6 distributed to the panel for review. Does
 7 anybody have any questions or comments from the
 8 panel?
 9 (No response).
 10 DR. BEKKER: Motion for approval?
 11 DR. BRIDGEMAN: Motion to approve.
 12 DR. KENNEDY: Second.
 13 DR. BEKKER: Okay.
 14 MS. STARK: Dr. Bridgeman?
 15 DR. BRIDGEMAN: Yes.
 16 MS. STARK: Dr. Bekker?
 17 DR. BEKKER: Yes.
 18 MS. STARK: Dr. Johansen?
 19 DR. JOHANSEN: Yes.
 20 MS. STARK: Dr. Kennedy?
 21 DR. KENNEDY: Yes.
 22 MS. STARK: And Dr. Zarus?
 23 DR. ZARUS: Yes.
 24 MS. STARK: Five yes. Motion
 25 carried.

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1 DR. BEKKER: So let me explain what's
 2 going to happen today. The members of the panel
 3 received 45 petitions and 45 petitions have been
 4 under consideration. So it will be -- so all of
 5 us, 45 petitions in the group with eight
 6 conditions and each condition was considered
 7 separately and the conditions are chronic pain
 8 related to musculoskeletal disorder, migraine,
 9 anxiety, chronic pain of visceral origin,
 10 Tourette's syndrome, asthma and chronic fatigue.
 11 And a couple of groupings took place.
 12 Under the umbrella of anxiety, for example, we
 13 included anxiety associated with autism, anxiety
 14 associated with Alzheimer's disease and so on.
 15 Medicinal marijuana is not a cure for this
 16 disease but it alleviates symptoms. So this how
 17 the grouping was -- how we proceed.
 18 So I will ask vice chair of this
 19 panel, Dr. Kennedy, to explain the factors which
 20 were considered in making our determination.
 21 After she will do that, we will separately look
 22 at every condition and see what additional
 23 comments, public comments, etcetera, and at that
 24 point we will be ready to go over each condition
 25 separately.

<p style="text-align: right;">Page 6</p> <p>1 (Susan Carson confers with 2 Dr. Bekker.) 3 DR. BEKKER: Apparently before 4 Dr. Kennedy will do it, each member has to 5 reintroduce him or herself. 6 DR. KENNEDY: Go ahead. 7 DR. JOHANSEN: I'm Dr. Mary Johansen. 8 I'm a clinical associate professor at 9 Rutgers University and the Associate Director 10 for the New Jersey Collaborating Center for 11 Nursing. 12 DR. BEKKER: I'm Alex Bekker. I'm a 13 professor and chair of the department of 14 anesthesiology at Rutgers New Jersey Medical 15 School. 16 DR. KENNEDY: Cheryl Kennedy. I'm an 17 associate professor at New Jersey Medical School 18 of Rutgers in Newark. I'm board certified in 19 psychiatry and in addiction medicine. 20 DR. ZARUS: Stephanie Zarus. I'm the 21 managing director of Avancer Group and my 22 background is in care and hospice. 23 DR. BRIDGEMAN: I'm Mary Bridgeman. 24 I'm a clinical associate professor in the 25 Department of Pharmacy at Rutgers University and</p>	<p style="text-align: right;">Page 8</p> <p>1 cause severe suffering, such as severe and/or 2 chronic pain, severe nausea and/or vomiting or 3 otherwise severely impair the patient's ability 4 to carry on the activities of daily living. 5 Number four; the availability of 6 conventional medical therapies other than those 7 that cause suffering to alleviate suffering 8 caused by the condition and/or the treatment 9 thereof. 10 Number five; the extent to which the 11 evidence that is generally accepted among the 12 medical community and other experts supports a 13 finding that the use of marijuana alleviates 14 suffering caused by the condition and/or the 15 treatment thereof, and, number six; letters of 16 support from physicians or other licensed 17 healthcare professionals knowledgeable about the 18 condition. 19 I'll carry on here. Pursuant to 20 N.J.A.C. 8:64-5.3 Section D, the panel is 21 charged with and did make a recommendation to 22 the Commissioner on the petitions as follows: 23 One; whether the medical condition 24 and/or the treatment thereof are -- is or are 25 debilitating, whether marijuana is more likely</p>
<p style="text-align: right;">Page 7</p> <p>1 an internal medicine clinical pharmacist at 2 Robert Wood Johnson University Hospital. I'm 3 board certified in pharmacotherapy and geriatric 4 pharmacotherapy. 5 DR. KENNEDY: Should I carry on now? 6 DR. BEKKER: Yes, please. 7 DR. KENNEDY: Okay. Thank you. 8 My name is Cheryl Kennedy and I'm 9 going to tell you the factors that were 10 considered by the panel according to our rules 11 set forth in New Jersey A.C. 8:64-5.3 Section A. 12 Number one; the extent to which -- 13 this is our consideration. The extent to which 14 the condition is generally accepted by the 15 medical community and other experts as a valid 16 existing medical condition. 17 Number two; if one or more treatments 18 of the condition, rather than the condition 19 itself, are alleged to be the cause of the 20 patient's suffering, the extent to which the 21 treatments causing suffering are generally 22 accepted by the medical community and other 23 experts as valid treatments for the condition. 24 Number three; the extent to which the 25 condition itself and/or the treatments thereof</p>	<p style="text-align: right;">Page 9</p> <p>1 than not to have the potential to be beneficial 2 to treat or alleviate the debilitation 3 associated with the medical condition and/or the 4 treatment thereof, and, number three, other 5 matters that the panel recommends that the 6 Commissioner consider that are relevant to the 7 approval or denial of the petition. 8 DR. BEKKER: Thank you, Dr. Kennedy. 9 So the next step is our panel -- 10 May 25th of '16 was first meeting of this panel, 11 then February 22nd, '17 and 5/11/17 and public 12 hearing was held on 9/18/17. 13 Based on documents from this meeting 14 and our reading extensive reading of the 15 literature, we came up with our initial 16 preliminary recommendation to Commissioner. The 17 panel approved the additional chronic pain 18 related to musculoskeletal disorder, migraine, 19 anxiety, chronic pain of visceral origin and 20 Tourette's syndrome and the panel did not 21 approve the condition of asthma and chronic 22 fatigue. 23 I just would like to kind of clarify 24 how the panel came to this conclusion. Each 25 member of the panel reviewed all evidentiary</p>

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1 literature. I would like to emphasize that the
 2 decision of the panel are not based -- are not
 3 based on opinion, are not based on
 4 recommendation of some particular society. All
 5 our job is -- was, is and would be to
 6 objectively evaluate everything based on
 7 science. It's all what it should be.
 8 Again, the opinion of different
 9 organization, medical organization, legal,
 10 clergy and whatever, this is not part of this --
 11 part of our decision and each member of this
 12 panel will justify his or her position in very
 13 short statement. Again, I think at some point
 14 our evaluation will be posted on our website,
 15 but today we will have very short kind of
 16 explanation why, why member came to conclusion.
 17 Okay. Now, we would like to --
 18 initial recommendation. The initial
 19 recommendation you probably had a chance to read
 20 on web. It's there. So today what we're going
 21 to do, the purpose of this meeting is for the
 22 panel to discuss, deliberate its recommendation
 23 on the petitions. The panel may take into
 24 consideration the petitions themselves,
 25 information received with petition, public

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1 comments, their own research or that done by
 2 others, as well as any education, training,
 3 experience or other sources which helped the
 4 member to arrive at their recommendation. More
 5 specifically, the panel will determine whether,
 6 after having the benefit of reviewing input from
 7 the public hearing and comment period, there are
 8 any changes to be made to its initial
 9 recommendations.
 10 At this point all members of the
 11 panel will participant. The panel submitted --
 12 okay. Okay. Just to follow proceeding, I have
 13 to read a certain portion of this document.
 14 Okay. So panel submitted its written
 15 initial recommendation to the Department of
 16 Health on 7 -- on July 21st, '17. The initial
 17 recommendation was posted for 60-day public
 18 comments on July 25th, '17. A public hearing
 19 was held on September 18, '17. Approximately 65
 20 written comments were reviewed by the
 21 department. Copies of the comments and
 22 transcript of the public hearing were forwarded
 23 to the panel members for their consideration.
 24 (Ms. Carson has contacted Dr. Petros
 25 Levounis via telephone and he is now

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1 present via telephone.)
 2 DR. BEKKER: So, Dr. Levounis, at
 3 this point we are going to discuss and
 4 deliberate on each condition and vote on each
 5 particular condition. So this is where we stand
 6 right now.
 7 Again, as I mentioned before, our
 8 recommendation, our role should be based
 9 scientifically on peer-reviewed publication,
 10 evidence base only. It's not opinion of
 11 particular organization. It's not opinion of
 12 clergy or anybody else. Our job is to evaluate
 13 valid scientific evidence for this condition. I
 14 just wanted to repeat that.
 15 So having said that, we will start --
 16 we will consider condition by condition and
 17 we'll start with chronic pain related to
 18 musculoskeletal disorder.
 19 At this point -- and let me start and
 20 then each member will state his or her --
 21 actually in this case, her position.
 22 So my recommendation is based on
 23 extensive review of literature which clearly
 24 indicates that medicinal marijuana helps
 25 alleviate chronic pain, chronic pain syndrome

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1 associated with musculoskeletal disorders. This
 2 includes conditions like fibromyalgia, failed
 3 back syndrome and similar conditions.
 4 In addition, there are systematic
 5 reviews and many analysis which confirm my
 6 conclusion. Academies of Sciences, Engineering
 7 and Medicine also recommend medicinal marijuana
 8 as a treatment for chronic pain, chronic back
 9 pain or pain secondary to musculoskeletal
 10 disorder.
 11 So that's about all that I have to
 12 say on this. Questions -- actually I will ask
 13 you to -- if you don't mind as public, wait with
 14 your questions. Write it down. When
 15 deliberation for each particular condition would
 16 be over, you will have chance to ask -- comment
 17 or whatever, offer your opinion.
 18 So Dr. Johansen.
 19 DR. JOHANSEN: Thank you.
 20 I also reviewed not only -- for each
 21 one of these I reviewed not only the petitions
 22 but the evidence that was provided by each of
 23 the petitioners as well as evidence that's out
 24 there in the literature.
 25 The evidence that I looked at was

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1 peer-reviewed journals, which is very important
 2 because it does provide evidence of rigor in
 3 terms of research and science, and I am in
 4 agreement with Dr. Bekker. I found that there
 5 were clear evidence -- there was clear evidence
 6 to establish clear relationships between the use
 7 of medicinal marijuana to alleviate chronic pain
 8 related to musculoskeletal disorders.
 9 DR. BEKKER: Dr. Kennedy.
 10 DR. KENNEDY: Thank you.
 11 I reviewed the literature extensively
 12 about the condition itself and about the
 13 treatments for it and I discovered although
 14 there are a multitude of therapies for
 15 gastrointestinal disorders or other sources of
 16 visceral pain, the only actually accepted
 17 treatment of these associated pains was opioid
 18 analgesic medication, some anticholinergic and
 19 anti-spasmodic medication can help relieve some
 20 painful bowel spasms but can worsen constipation
 21 and lead to difficulty in urination.
 22 Some people may benefit from bile
 23 acid binders, bicholestyramine, but these can
 24 lead to painful bloating. Anti-depressants are
 25 commonly prescribed for pain relief, but these

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1 are associated with complications and do not
 2 actually address pain specifically but rather
 3 the other emotional states that may make pain
 4 worse.
 5 Opioids are used in patients with
 6 more severe visceral pain, but may induce
 7 constipation, nausea, vomiting, dizziness, which
 8 is itchiness on the skin, and respiratory
 9 distress and carries the risk of many adverse
 10 effects including death.
 11 As is well known, these conditions --
 12 these medications, the opioid analgesics are
 13 highly addictive. The opioid epidemic and its
 14 attendant sequela of overdoses including fatal
 15 ones is considered to be a major public health
 16 emergency at this time in the United States.
 17 So the chronic pain related to
 18 pathophysiology and its treatment can lead to a
 19 lot of other additional problems and these
 20 conditions may dramatically reduce the quality
 21 of life and the ability of patients to work and
 22 obtain gainful employment.
 23 The extent to which this evidence is
 24 accepted is -- there are more than 400 peer-
 25 reviewed publications on the subject. The

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1 petitions that I reviewed included a number of
 2 supportive articles and there are letters of
 3 support from physicians and other licensed
 4 healthcare professionals knowledge about --
 5 knowledgeable about the condition.
 6 It is -- so that this chronic
 7 visceral pain is often physically and
 8 psychologically incapacitating and these
 9 petitions present heartbreaking stories of
 10 dramatically diminished quality of life and it
 11 is therefore my opinion that there is sufficient
 12 medical evidence to support the recommendation
 13 for medicinal marijuana for the treatment of
 14 pain of visceral origin.
 15 DR. BEKKER: Superb, Dr. Kennedy.
 16 Dr. Zarus.
 17 DR. ZARUS: Okay. But we are talking
 18 about pain related to musculoskeletal?
 19 DR. BEKKER: Musculoskeletal, right.
 20 DR. KENNEDY: I'm sorry. I went on a
 21 tangent. It's actually quite --
 22 DR. BEKKER: Here we have two
 23 separate conditions. There are some differences
 24 physiologically and how these conditions are
 25 treated. That's why original grouping put this

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1 in two different categories.
 2 DR. ZARUS: Right.
 3 DR. BEKKER: They're treated by
 4 doctors different, different medication. So
 5 that's how they grouped that.
 6 Dr. Zarus.
 7 DR. ZARUS: So we'll come back to
 8 visceral pain, but I'm going to go back to
 9 musculoskeletal.
 10 DR. BEKKER: Exactly.
 11 DR. ZARUS: With regard to the
 12 petitions that I reviewed related to
 13 musculoskeletal disorder, there were 32 of them
 14 in which we found -- in which I found the value
 15 or benefit of medicinal marijuana, particularly
 16 in subgroups of individuals who are unresponsive
 17 to conventional therapy. So conventional
 18 therapy does exist for managing musculoskeletal
 19 disorders and the pain related to that disorder
 20 in the majority of patients, but there are
 21 subgroups of patients whose condition is not
 22 palated (ph) or improved with conventional
 23 medication and/or the adverse effects of that
 24 conventional treatment may outweigh the use of
 25 it and in these particular patients the value

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1 and ability to use medicinal marijuana has been
 2 demonstrated through medical evidence, and so I
 3 continue to support first the individual
 4 petitions to approve or enable medicinal
 5 marijuana to be available for individuals who
 6 are unresponsive to conventional therapy in the
 7 management of chronic pain related to
 8 musculoskeletal disorders.

9 DR. BEKKER: Thank you, Dr. Zarus.
 10 Dr. Bridgeman.

11 DR. BRIDGEMAN: Thank you.

12 So I just want to preface sort of my
 13 comments with sharing the fact that there was a
 14 report that was published in January of 2017,
 15 The Health Effects of Cannabis and Cannabinoids,
 16 The Current State of Evidence and
 17 Recommendations for Research, and this was a
 18 document made available by the National
 19 Academies of Sciences, Engineering and Medicine
 20 and this was a document that I found in my
 21 research with all of these petitions that was
 22 particularly helpful in summarizing the state of
 23 the evidence and the state of the science and
 24 pointing to some of the primary literature that
 25 I used in developing my opinion.

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1 With regards to the chronic pain
 2 question and particularly chronic pain related
 3 to musculoskeletal disorders, it's been pointed
 4 out by my colleagues that while there are
 5 conventional therapies that exist for managing
 6 these types of pain, the petitions that were
 7 largely reviewed were in situations where either
 8 traditional therapy had failed or symptoms were
 9 refractory to traditional therapy.

10 We also read in the petitions about
 11 severe debilitating symptoms or debilitations
 12 related to adverse effects of certain
 13 medications.

14 In that regard and in considering the
 15 systematic reviews -- there are two systematic
 16 reviews, a meta-analysis that suggests moderate
 17 to high quality evidence that medicinal cannabis
 18 was used to improve pain scores in patients with
 19 chronic pain and based on the evidence from the
 20 National Academies of Sciences there is
 21 conclusive or substantial evidence that cannabis
 22 or cannabinoids are effective in chronic pain in
 23 adult patients, I came to the conclusion that
 24 this would be an appropriate indication and use
 25 of this therapy.

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1 DR. BEKKER: Thank you,
 2 Dr. Bridgeman.

3 Dr. Levounis.

4 DR. LEVOUNIS: Yes, I also reviewed
 5 the literature extensively as well as the
 6 testimony presented in front of this panel.

7 The first question of whether the
 8 medical condition or treatment is debilitating,
 9 I agree and I vote yes for that. The
 10 heartbreaking stories that we all heard I think
 11 substantiate this vote.

12 The second question of is marijuana
 13 more likely than not to have the potential to be
 14 beneficial to treat or alleviate the
 15 debilitation associated with the medical
 16 condition or the treatment thereof, I vote no.

17 I have found that smoking as a means
 18 of (indiscernible) and of course the components
 19 of marijuana (indiscernible) in the U.S.

20 At this point I find that there's
 21 insufficient evidence for (indiscernible) of
 22 smoking cannabinoids such as marijuana
 23 (indiscernible).

24 I just want to add that this was
 25 supported also by a number of the

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1 (indiscernible) from the American Cancer
 2 Association and the American Society of
 3 (indiscernible).

4 DR. BEKKER: Okay. Should we
 5 deliberate or just vote? What's the process?
 6 Or maybe public has a comment or question.

7 (Dr. Bekker confers with colleagues.)

8 DR. BEKKER: So right now members of
 9 public you have a chance to comment. Please be
 10 short. It's a lot of -- it's very long. So if
 11 you have any comments, on this condition only,
 12 so please do.

13 And if there's no public comments,
 14 and it doesn't look to me, so we'll just
 15 continue with the next condition.

16 MR. LIVINGSTON: Hi, Doctors. I'm
 17 Edward Livingston.

18 As far as chronic pain goes, what
 19 were some of the subcategories of chronic pain?
 20 I'm very interested in being hopefully a
 21 patient. I'm a little skeptical as well as I
 22 heard from the other doctor, but I would
 23 rather -- I'm agreeing with Dr. Kennedy, I would
 24 rather -- I would rather try something else
 25 other than opioid medicine since there's a big

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1 epidemic of opioid medicine of which we all are
 2 aware of in the nation. So I would like to know
 3 some of the subcategories and how many patients.
 4 I heard numbers thrown around, but how many
 5 patients were -- had a positive affect from your
 6 studies?
 7 DR. BEKKER: It's not our studies,
 8 but I can review conditions which would fall
 9 under the umbrella of chronic pain --
 10 MR. LIVINGSTON: Yes.
 11 DR. BEKKER: -- of musculoskeletal
 12 origin. This will include spinal stenosis,
 13 herniated disk, failed back syndrome,
 14 fibromyalgia, complex regional pain syndrome,
 15 disk herniation, degenerative disk disease.
 16 A lot of these conditions are not
 17 clear -- they don't have clear-defined etiology,
 18 but patient suffers and from what we know
 19 marijuana alleviates this pain and in large
 20 study, it's kind of an epidemiological study in
 21 states where marijuana was approved for
 22 medicinal purposes, patients started using
 23 marijuana, the opioid requirement went down by
 24 about 30 percent, which is obviously a positive
 25 thing to consider.

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1 treat. Currently we'll use NSAIDS, Ergots,
 2 treatments and things like that. However, this
 3 treatment do not alleviate pain in some patients
 4 and are associated with many side effects. We
 5 all know NSAIDS cause intestinal bleeding,
 6 heartburn. This may adversely affect kidneys
 7 and things like this.
 8 So current treatment is not
 9 effectively -- it's not effective in some
 10 patients. A number of studies suggest favorable
 11 effects of cannabis for treatment of migraines.
 12 This has been summarized in at least two reviews
 13 and my evaluation includes these references.
 14 So based on this literature and
 15 petitions which kind of heartbreaking, some of
 16 these stories, debilitating conditions, my
 17 recommendation is to approve medicinal marijuana
 18 for treatment of migraines which includes --
 19 again, it's kind of broader definition of
 20 migraine than actually medical definition of it.
 21 Okay. We go the other way right now.
 22 We start with Dr. Bridgeman.
 23 DR. BRIDGEMAN: Sure. I absolutely
 24 agree with your comments, Dr. Bekker, with
 25 regards to the adverse effects associated with

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1 Again, I want to emphasize this
 2 point. Opinion of medical organizations are
 3 available at this point. All opinions provide
 4 evidence-based medicine and this is what panel
 5 did.
 6 MR. LIVINGSTON: I appreciate it.
 7 Thank you, Doctor.
 8 DR. BEKKER: Unless there are any
 9 other comments, we'll go for the next condition.
 10 To the members, before we go, do we
 11 have any -- any of you change your position in
 12 view of this last comment? I guess not, but I
 13 supposed to ask you this question. Nobody?
 14 (No response.)
 15 DR. BEKKER: So next condition which
 16 we'll consider is migraine, and under migraine
 17 it's kind of a little bit broader definition
 18 than actual technical definition of migraine.
 19 It will include cluster headache, headache of
 20 unknown origin, but we all -- all these
 21 conditions group under umbrella of migraine.
 22 So my review of the literature
 23 suggests that -- I mean migraine it's very
 24 difficult -- let me preface by saying that
 25 migraine is extremely difficult condition to

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1 medications that are used in the management of
 2 migraines both in the treatment as well as the
 3 prophylactic and prevention of migraine
 4 headaches.
 5 Again, in addition to reviewing these
 6 petitions, I found a small -- there were a
 7 number of -- 121 patients included in a clinical
 8 evaluation on medicinal marijuana on migraine
 9 headache frequency in adults that was published
 10 in the Journal of Pharmacotherapy in 2016.
 11 Based on this retrospective chart review of
 12 adult patients who had been using medicinal
 13 cannabis for migraine treatment or
 14 prophylactics, the investigators concluded that
 15 medicinal cannabis was associated with
 16 significant, significantly significant reduction
 17 in migraine frequency attributed to medicinal
 18 cannabis use and I found that compelling
 19 evidence to support my recommendation for
 20 permitting migraines as an indication for
 21 medicinal cannabis use in New Jersey.
 22 DR. BEKKER: Thank you,
 23 Dr. Bridgeman.
 24 Dr. Zarus.
 25 DR. ZARUS: Yes, and I also concur in

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1 expanding the use to include medicinal marijuana
 2 for those individuals suffering from migraines
 3 and, again, it can be very debilitating to
 4 individuals who are not able to manage it with
 5 conventional therapy or have incidents that's
 6 not allowing them to have their migraine managed
 7 by conventional therapy.
 8 Again, I think of the articles
 9 referenced, there were a number that do support
 10 either eliminating or mitigating the effects of
 11 migraines through the use of the medicinal
 12 marijuana. So I also support that. Thank you.
 13 DR. BEKKER: Thank you, Dr. Zarus.
 14 DR. BRIDGEMAN: I just want to point
 15 out also from a pharmacologic perspective it may
 16 make sense to use medicinal cannabis for this
 17 particular condition because it has been
 18 hypothesized that cannabis may modulate the
 19 synergistic neural pathways. So it sort of
 20 makes sense when you think of the pharmacologic
 21 use for migraine management, that medicinal
 22 cannabis may have a role here.
 23 DR. BEKKER: Okay. Dr. Kennedy.
 24 DR. KENNEDY: Thank you.
 25 As stated, the condition of migraine

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1 or cluster headaches, retractible headaches are
 2 a well-known medical condition as well as
 3 described in medical literature as are some of
 4 the treatments and their various side effects
 5 and in many cases failure to actually treat the
 6 condition effectively.
 7 Many of the medications that are in
 8 current use, as stated and I agree, can cause
 9 very adverse effects in several organs. The
 10 NSAIDs, which are commonly known as ibuprofen,
 11 naproxen and medications of that order can cause
 12 severe GI tract problems, kidney failure in the
 13 elderly and can have cardiac effects and people
 14 that take anticoagulant therapy, which is very
 15 much in use these days, cannot -- should not
 16 also use these medications.
 17 There's also the Triptans, which are
 18 the most recent entrants into the pharmacopeia
 19 for headaches of this type can cause nausea,
 20 vomiting, dizziness on their own and they --
 21 these drugs can lead to what is known as a
 22 medication overuse headache and it's defined in
 23 our canon as occurring in 15 or more days per
 24 month in a patient with a pre-existing headache
 25 that uses these Triptans and they cannot be used

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1 in some variants of this disorder, the Triptan
 2 cannot in migraines because these drugs are also
 3 associated with an increased incidence of
 4 stroke.
 5 So the conventional therapies are
 6 ineffective for some patients and although
 7 medication may help many patients, there are
 8 individuals who are unresponsive and the
 9 condition leaves them quite disabled and
 10 debilitated with a very decreased quality of
 11 life and ability to function.
 12 Four of the five petitions were
 13 supported by licensed healthcare professionals.
 14 So I also considered that along with the
 15 literature that was already cited by my
 16 colleagues here. So I continue to come to the
 17 conclusion that this is a likely effective
 18 treatment for some people who have this
 19 debilitating type of headache.
 20 DR. BEKKER: Thank you,
 21 Dr. Kennedy.
 22 Dr. Johansen.
 23 DR. JOHANSEN: Yeah, so my colleagues
 24 have been very eloquent in stating all of the
 25 evidence from the literature and they spoke to

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1 conventional treatments, which are the NSAIDs
 2 we're talking about, the Advil, ibuprofen,
 3 naproxen. For patients that have other
 4 comorbidities that require them to take blood
 5 thinners, if you will, some of those modalities
 6 are not available to them. So many patients
 7 actually go to alternative therapies like
 8 biofeedback, aromatherapy. They stop smoking.
 9 They may not eat different foods as triggers,
 10 environmental triggers.
 11 So when I reviewed not only the
 12 petitions but the literature and actually did
 13 take a look back at the alternative therapies, I
 14 came to the conclusion that the potential
 15 effects of cannabis or cannabinoids I should say
 16 on the central nervous system indicates that
 17 marijuana may be a therapeutic alternative.
 18 I looked at several pieces of
 19 literature that did support that. One was by
 20 Russo who most certainly made that relationship
 21 established. So my conclusion was most
 22 certainly that this was definitely a modality
 23 that could be used for patients in an effective
 24 and therapeutic manner. So I vote yes.
 25 DR. BEKKER: Thank you, Dr. Johansen.

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1 I just would like to add that most of
 2 therapy recommendations in our purview and in
 3 our making this type of decision smoking is not
 4 the only way to deliver cannabis as a route.
 5 So, again, it's not our goal to figure out how
 6 to deliver. There are other methods of
 7 delivery. So I just want to make clear we are
 8 not advocating smoking or not smoking. This is
 9 not our job.
 10 Dr. Levounis.
 11 DR. LEVOUNIS: Yeah, I opine that the
 12 medical condition of migraine, cluster headache,
 13 headaches of unknown origin are certainly
 14 debilitating and they are heartbreaking stories.
 15 We heard that they truly are (indiscernible).
 16 So on the issue -- the second
 17 question of the potential being beneficial will
 18 be the same as before, I vote no on that because
 19 some of the components (indiscernible) migraine
 20 and other headache, then we should
 21 (indiscernible). There are many other medicine
 22 in the United States.
 23 DR. BEKKER: Thank you, Dr. Levounis.
 24 Any member from the audience would
 25 like to comment, let's do it now.

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1 (No response.)
 2 DR. BEKKER: No comments.
 3 Okay. We'll go to next condition.
 4 Next condition on my list is primary and
 5 secondary anxiety, and we'll collaborate a
 6 little bit what it means, secondary anxiety. We
 7 had three petition on this issue. Some of them
 8 related to primary disorder, being like autism
 9 or Alzheimer's and we don't -- we do not
 10 recommend -- we just cannot (indiscernible) for
 11 treating of autism -- either autism or
 12 Alzheimer. However, anxiety, and it's very
 13 critical, just bear with me, anxiety associated
 14 with autism, either autism or Alzheimer's can be
 15 treated with marijuana. We treat the disease,
 16 but we addressing the symptom.
 17 Okay. Now, anxiety is a debilitating
 18 disorder. Usually medication -- medication
 19 generally may not alleviate symptom and
 20 pharmacotherapy usually include anti-depressant.
 21 This adversely affect such like nausea,
 22 vomiting, insomnia, some lead to suicidal
 23 ideation, weight gain.
 24 Benzodiazepine is another class of
 25 drug. Common side effect include headache,

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1 confusion, tiredness. In some people it causes
 2 nightmares, difficulty thinking and remembering
 3 stuff. It affects memory and actually use this
 4 drug to -- for amnesia. So it definitely will
 5 affect memory.
 6 So my review of literature suggests
 7 that it might alleviate some of the symptoms
 8 with less side effects than commonly accepted
 9 medical treatment. So based on this fact, I
 10 approve -- I will recommend to approve marijuana
 11 for treatment of anxiety primary and secondary.
 12 I guess we'll start from here.
 13 Dr. Johansen.
 14 DR. JOHANSEN: So again, Dr. Bekker
 15 mostly gave a broad overview of anxiety. I
 16 would like to add that anxiety in a mild form is
 17 generally treated with like a type of therapy or
 18 a counseling. It's not always a primary measure
 19 to go to pharmacotherapy to treat patients. So
 20 patients that do have these kind of issues
 21 actually wind up having to go through a
 22 progression before anything is prescribed to
 23 them and then when they are prescribed, it's
 24 usually some type of an anti-depressant possibly
 25 or Benzodiazepine and many of these can be

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1 actually treated via -- they're poorly tolerated
 2 by many patients depending upon what other
 3 comorbidities or things are going on with them.
 4 I went back to the literature --
 5 again, there was many pieces of literature that
 6 were submitted by the petitioners, but I went
 7 back to the literature and found in excess of
 8 425 research articles that established the
 9 relationship for symptom management for those
 10 individuals with anxiety and based upon that I
 11 came to the conclusion that it would be best
 12 served for the citizens of New Jersey that
 13 marijuana be approved for symptoms treated for
 14 anxiety.
 15 DR. BEKKER: Thank you, Dr. Johansen.
 16 Dr. Kennedy.
 17 DR. KENNEDY: Thank you.
 18 Yes, anxiety is a debilitating and
 19 disabling condition in many cases and yes, there
 20 are mild forms that can be treated with
 21 non-pharmacologic intervention.
 22 However, when the anxiety does
 23 require a pharmacologic intervention, whether
 24 it's primary or secondary in nature depending on
 25 the origin of the anxiety, my review of the

<p style="text-align: right;">Page 34</p> <p>1 literature and of the available information 2 about these conditions tells me that the 3 conventional therapies are unacceptable in many 4 cases because of the side effects and I'd like 5 to point out that the Benzodiazepines, which are 6 the primary go-to gold standard for treating 7 anxiety disorders, are known to be controlled 8 substances. They are widely abused in the 9 community. This is well known and follows the 10 opioid crisis in some ways. Although it is 11 difficult to overdose purely from 12 Benzodiazepine, the actual withdrawal from these 13 medications can be life threatening and requires 14 medical supervision if people become dependent 15 or addicted upon them. 16 So there are some serious adverse 17 effects related to the primary treatment 18 modality and many patients are unwilling or 19 unable to tolerate these medications because of 20 these problems, and it is apparent through the 21 review of literature already cited by some of my 22 colleagues that these conditions, these types of 23 anxiety conditions can be possibly effectively 24 treated with the medicinal marijuana and, as we 25 know, there are a variety of delivery forms</p>	<p style="text-align: right;">Page 36</p> <p>1 more ambivalent than half of my colleagues with 2 regard to my evaluation of anxiety as an 3 indication. I absolutely appreciate the 4 attention and the evidence that was supported 5 with regards to these claims and my assessment 6 was really based on sort of a risk benefit 7 analysis here. 8 I think the evidence for anxiety as 9 an indication is a little bit more limited than 10 the clinical evidence, which is very robust for 11 chronic pain and the indication we spoke of. 12 There is limited clinical evidence 13 that cannabis and cannabinoids, and especially 14 cannabidiol is effective in managing anxiety 15 symptoms and in my evaluation of the literature 16 it was in particular social anxiety disorder 17 which seemed to have the most robust evidence at 18 this time. 19 I do want to just express the fact 20 that there are some concerns and there is some 21 evidence in the literature that cannabis may 22 also exacerbate anxiety symptoms or an adverse 23 effect related to cannabis may be associated 24 with anxiety. 25 So sort of weighing out exacerbating</p>
<p style="text-align: right;">Page 35</p> <p>1 including non-smoking forms that are available 2 in New Jersey, and so I continue to come to the 3 conclusion that this -- these conditions, that 4 is primary and secondary anxiety should be 5 approved for use by the Commissioner. 6 Thank you. 7 DR. BEKKER: Thank you, Dr. Kennedy. 8 Dr. Zarus. 9 DR. ZARUS: Thank you. 10 I too support the conclusion of my 11 colleagues that medicinal marijuana can be a 12 benefit in anxiety, particularly in those 13 patients that suffer anxiety at its worst, which 14 can even conclude in suicide or lead people 15 towards suicide. 16 I think there are a number of things 17 we already heard and again the risks can be 18 intolerable in some people and there is 19 significant evidence to demonstrate that there 20 is a place for medicinal marijuana in the 21 primary care of fighting anxiety in those who 22 have it in the worst possible condition. 23 DR. BEKKER: Thank you, Dr. Zarus. 24 And Dr. Bridgeman. 25 DR. BRIDGEMAN: I think I'm a little</p>	<p style="text-align: right;">Page 37</p> <p>1 anxiety versus the limited evidence, I did come 2 to the conclusion that there wasn't enough 3 evidence to support a recommendation for use in 4 those patients refractory to traditional 5 pharmacotherapy. 6 I also just want to point out that 7 we've never had an FDA-approved medication that 8 was administered via smoking and I'm not an 9 advocate of smoking as drug administration here 10 as well, but there are alternative dosage forms 11 available and as a pharmacist I'm remiss if I 12 don't mention that. 13 DR. BEKKER: Dr. Kennedy would like 14 to add a comment. 15 DR. KENNEDY: Yes. I would agree 16 with Dr. Bridgeman's statements about you can 17 have anxiety produced from the use of medicinal 18 marijuana and one would certainly hope that if 19 the condition one is trying to treat is 20 exacerbated, you would no longer seek that 21 treatment. 22 Additionally I would like to say that 23 all the petitions were supported by licensed 24 healthcare professionals. 25 DR. BEKKER: Dr. Levounis.</p>

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1 DR. LEVOUNIS: Yes, I agree with my
 2 colleagues that the medical condition is
 3 debilitating for both primary and secondary
 4 anxiety. In terms of being beneficial, exactly
 5 as I mentioned before, I vote no.
 6 There is benefit profile in favor of
 7 marijuana at this point at least and I wish to
 8 reserve the ability to analyze the components of
 9 marijuana in the future (indiscernible).
 10 I just want to make one more
 11 clarification. It was mentioned before the gold
 12 standard treatment for anxiety was in 2017
 13 Benzodiazepine. (Indiscernible).
 14 DR. BEKKER: Thank you, Dr. Levounis.
 15 Yes, Dr. Kennedy would like to
 16 respond, please.
 17 DR. KENNEDY: Right. Thank you,
 18 Dr. Levounis, and I do appreciate that current
 19 recommendation for anxiety. However, in cases
 20 of acute anxiety anti-depressants, which may be
 21 effective in some patients with anxiety,
 22 anti-depressants are not effective initially in
 23 an acute condition; panic, etcetera. They take
 24 anywhere from two to six weeks at the right dose
 25 to provide an effective dose, if they're going

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1 to be effective.
 2 Thank you.
 3 DR. BEKKER: I also would like to
 4 comment and say that also conceptually I
 5 absolutely agree with Dr. Levounis that in the
 6 future if we can determine what component of
 7 marijuana are useful, we should definitely
 8 pursue this venue.
 9 However, currently we don't know what
 10 exactly -- how marijuana works. You know, kind
 11 of it's always better to be wealthy and healthy
 12 than poor and sick, yes, I agree with you, but
 13 right now we don't have this medication. So we
 14 kind of -- at least at this current state of
 15 science. My approval may change in future, but
 16 right now we don't have this medication.
 17 So I just want to put it for the
 18 record. We don't have this piece, which
 19 extract, particular component, chemical which
 20 deal with this anxiety or this chronic pain.
 21 Okay. So I think we done with
 22 comments on anxiety and our next condition is --
 23 MS. STARK: Wait.
 24 MR. MILLER: Excuse me, Doctor.
 25 DR. BEKKER: Oh, yeah.

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1 MR. MILLER: Are you taking
 2 comments?
 3 DR. BEKKER: I'm sorry. Please. I
 4 apologize. It's time for public to comment on
 5 this condition. Again, my apologies.
 6 MR. MILLER: Thank you.
 7 James Miller, co-founder of Coalition for
 8 Medical Marijuana in New Jersey. I want to
 9 point out two things to what you were just
 10 talking about.
 11 Dr. Johansen, you mentioned
 12 Dr. Russo's studies for migraines. The
 13 interesting point about one of his studies is he
 14 could not get FDA approval for the -- he
 15 couldn't get the cannabis with National
 16 Institute on Drug Abuse approval because they
 17 released the marijuana for efficacy citations. He
 18 had to wait a period of time and submit the
 19 exact same protocol saying he was worried it
 20 might harm them in some way and then he did get
 21 to proceed with that.
 22 So my point is is when there are not
 23 efficacy studies done, unless you can say that
 24 you know how many were turned down and not
 25 allowed, you know, it's very important.

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1 The second thing is as to yes,
 2 marijuana will cause anxiety in some people. So
 3 it's counterintuitive to let somebody with
 4 anxiety have it. Sometimes weirdly enough it's
 5 like minus two times minus two isn't minus four,
 6 you know.
 7 Another thing though the FDA-approved
 8 drugs for anxiety also have anxiety as a
 9 potential side effect, yet they have other FDA-
 10 approved drugs to counteract. You know, it's
 11 bizarre.
 12 So I appreciate Dr. Bekker taking --
 13 especially making a point to take the side
 14 effects into account because from a patient
 15 point of view, FDA-approved side effects are no
 16 better than unapproved side effects. They hurt
 17 just the same.
 18 So that's it.
 19 DR. BEKKER: Thank you, Mr. Miller.
 20 If there are no other comments, we
 21 will move on.
 22 Our next condition is Tourette
 23 syndrome. Give me one second. Give me one
 24 second to find my recommendation.
 25 (Dr. Bekker confers with colleagues.)

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1 DR. BEKKER: Oh, okay. I'm sorry. I
 2 apologize. Next condition we will consider will
 3 be chronic pain of visceral origin.
 4 There are three petitions related to
 5 this condition, which include chronic acute
 6 pancreatitis, pain related to neurogenic bladder
 7 and bowel disfunction, and irritable bowel
 8 syndrome.
 9 This is rare condition, but extremely
 10 painful and extremely difficult to treat. Any
 11 pain of visceral origin well documented is
 12 extremely difficult condition to treat and my
 13 recommendation based partially on -- partially
 14 on available literature but partially simply on
 15 compassionate kind of use of this drug.
 16 It appears that it relieves pain and
 17 even if evidence here is not as clear or as
 18 clean as what chronic back pain or chronic pain
 19 of muscle origin, it's not -- I admit it's not
 20 as clear-cut evidence. However, I believe that
 21 part of being a doctor is to appreciate the
 22 suffering of people. So partially my decision
 23 is based just on that. So based on that I will
 24 recommend to approve marijuana for pain
 25 secondary to visceral origin.

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1 Let's go the other way around.
 2 Dr. Bridgeman.
 3 DR. BRIDGEMAN: So, you know,
 4 undoubtedly chronic pain of visceral origin is a
 5 condition that's accepted by the medical
 6 community as being potentially severe and
 7 debilitating and we realize that there are both
 8 non-pharmacologic interventions in the case of
 9 irritable bowel syndrome or some of these
 10 conditions as well as drug therapies that may
 11 have a role in alleviating symptoms of chronic
 12 pain associated with either irritable bowel or
 13 chronic pancreatitis.
 14 You know, when we think about the
 15 adverse effects associated with the medications
 16 including the opioids which can be used for
 17 these conditions, they can be severe and
 18 debilitating. We've already discussed that.
 19 There is evidence to suggest that
 20 medicinal use of cannabis may have efficacies of
 21 treatment of chronic pain syndrome and we do
 22 have some limited clinical evidence to suggest
 23 that cannabinoids in the treatment of
 24 pancreatitis or irritable bowel may have
 25 efficacy and that was largely where I came to my

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1 conclusion on indicating or expanding use for
 2 these conditions in New Jersey.
 3 There is evidence that suggests that
 4 the endo-pathway system plays a role in
 5 modulating these disorders and in my mind from a
 6 pharmacological perspective, use of cannabis
 7 sort of intuitively would make sense based on
 8 some sort of pathophysiology that's been
 9 described.
 10 DR. BEKKER: Thank you,
 11 Dr. Bridgeman.
 12 Dr. Zarus.
 13 DR. ZARUS: Yes, thank you.
 14 Well, I concur. I mean we -- this is
 15 a condition in which internal organs are
 16 distended in some way. The pain related to
 17 that, while there is some pharmacological
 18 benefit available today, in many cases people
 19 are refractory to that and the condition can be,
 20 you know, retractable and debilitating and there
 21 is evidence, as you heard, of the benefit that
 22 medicinal marijuana can play from a
 23 pharmacological perspective on the ability
 24 for -- or quality of life for an individual.
 25 So I do concur that including pain of

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1 visceral origin should be added to the list of
 2 acceptable conditions for medicinal marijuana.
 3 DR. BEKKER: Thank you, Dr. Zarus.
 4 Dr. Kennedy.
 5 DR. KENNEDY: Thank you.
 6 I'd like to do a partial correction
 7 to the record regarding my previous remark about
 8 visceral pain which I addressed earlier when we
 9 were addressing musculoskeletal pain.
 10 So regarding musculoskeletal pain,
 11 just to make sure the record is clear, I agree
 12 with my colleagues who spoke on that, that yes,
 13 it is actually known as the top five medical
 14 conditions that disables people, this chronic
 15 pain syndrome of musculoskeletal origin.
 16 Now, to address the pain of visceral
 17 origin, many of the pains that come from
 18 visceral origin are actually related to muscles
 19 and other tissue within the internal organs or
 20 surrounding the internal organs which sometimes
 21 expands due to congestion and inflammation and
 22 these can cause severe and debilitating pain
 23 and, as already noted, the current
 24 pharmacotherapy cannot only exacerbate the
 25 problem, especially in the GI tract if people

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1 are suffering with constipation, opioid
 2 analgesics continue to worsen that kind of
 3 effect.
 4 So these kinds of pains are extremely
 5 debilitating and very, very difficult to treat
 6 even with the opioid analgesics and any other
 7 kinds of pharmacological intervention.
 8 So I have found that there are
 9 several peer-reviewed publications that speak to
 10 the beneficial effects of cannabis for the
 11 treatment of pain resulting from inflammation or
 12 malfunction of the internal organs. They were
 13 published in respected peer-reviewed journals in
 14 2007, 2011 and 2013, to mention three of them.
 15 So in my opinion there is more than
 16 sufficient evidence to recommend medicinal
 17 cannabinoids for visceral pain.
 18 DR. BEKKER: Thank you, Dr. Kennedy.
 19 And Dr. Johansen.
 20 DR. JOHANSEN: I concur with my
 21 colleagues regarding the evidence in the
 22 literature and I would like to add the
 23 following; the individual who has chronic pain
 24 related to visceral origin more often than not
 25 it could be a bowel malfunction like irritable

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1 bowel syndrome, Crohn's is commonly -- you kind
 2 of hear that when you talk about visceral
 3 disfunction, but these individuals experience
 4 not only the physical pain, but they also
 5 experience problems that are psychosocial in
 6 nature, which includes suicidal ideation,
 7 depression, pain and anxiety, which actually
 8 impacts the individual's quality of life and
 9 these can be extraordinarily detrimental.
 10 And in addition to the
 11 pharmacological treatment for chronic pain
 12 related to bowel malfunction and specifically
 13 related to viscera may actually lead to an
 14 exacerbation of the individual's symptoms.
 15 I also noted that there was no one
 16 accepted treatment of pain of visceral origin
 17 which is a -- which is not necessarily a
 18 concern. The management by any provider most
 19 certainly needs to provide optimal situations
 20 for the patient in terms of quality of life and
 21 pain management, but some of the anticholinergic
 22 and antispasmodic medication that they use do
 23 indeed provide some painful relief of bowel
 24 spasms, but there are pretty significant side
 25 effects to that and that really can be almost

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1 more detrimental than the pain. Patients have
 2 to kind of weigh back and forth, what is the
 3 best modality for them to do.
 4 And so based upon the evidence from
 5 the literature and my feelings and experience
 6 with the quality of life with these patients,
 7 certainly I support the use of marijuana,
 8 medicinal marijuana for the treatment.
 9 DR. BEKKER: Thank you, Dr. Johansen.
 10 And Dr. Levounis.
 11 DR. LEVOUNIS: Yes, on the issue of
 12 whether the chronic pain of visceral origin is
 13 debilitating, I vote yes, and on the second
 14 issue of the benefit of (indiscernible) I vote
 15 no.
 16 At this point we're hearing something
 17 that has come up in the testimony we heard
 18 before and as to opioid, some people put forward
 19 the idea that perhaps cannabis use can double as
 20 a means of curbing the issue of the opioid
 21 epidemic somehow in the future in that regard.
 22 There was a very extensive article
 23 that was published in the American Journal of
 24 Psychiatry in September of 2017 and that's why
 25 it's not in my original testimony.

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1 (Indiscernible) and colleague concludes that
 2 cannabis use appears to increase rather than
 3 decrease the (indiscernible) opioid use and
 4 opioid use is shorter, and this I state on the
 5 data of over 34,500 patients.
 6 DR. BEKKER: Thank you, Dr. Levounis.
 7 DR. LEVOUNIS: Or rather 500 people,
 8 not patients. 34,500.
 9 DR. BEKKER: Thank you, Dr. Levounis.
 10 I'm not familiar with this study. I guess it
 11 just came out. The study which was published in
 12 JAMA in 2015 assessed the results of
 13 legalization of medicinal marijuana in Colorado
 14 and they state in JAMA article that deaths
 15 association with opioid overdose went down by
 16 about 28 percent, something like this after
 17 legalization.
 18 There was another study, which is in
 19 my evaluation, which shows that patients on
 20 chronic opioid -- again this is large study.
 21 Patient on chronic opioid who use marijuana, use
 22 of opioid went down by about 40 percent and
 23 about 10 -- another 10 percent of patient
 24 completely off opioid.
 25 So, again, I would be interested to

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1 read this publication in American Journal of
 2 Psychiatry, but leaving this issue aside, from
 3 all other systematic review in meta-analysis
 4 suggest that use of opioid is reduced when -- in
 5 states with the medicinal marijuana or legalized
 6 marijuana, as a matter of fact.
 7 DR. LEVOUNIS: You know, this is
 8 based on (indiscernible) and that's why
 9 (indiscernible) as to what's going on in the
 10 association between cannabis use and
 11 (indiscernible).
 12 DR. BEKKER: Right. I'm sorry that I
 13 didn't read this article, so I cannot comment.
 14 They're probably very sure they're correct, but
 15 there are studies on both sides. So one study,
 16 you cannot say that this study absolutely denied
 17 all available evidence like (indiscernible)
 18 studies, stuff like that. Science is
 19 developing.
 20 Maturity (indiscernible) studies
 21 shows that marijuana reduces opioid consumption
 22 and (indiscernible) shows something else. So
 23 until, you know, this should be -- public should
 24 know about this study and thank you for bringing
 25 this particular research to our attention. I

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1 presume that members of this panel will
 2 familiarize ourselves -- acquaint ourselves with
 3 this research and see how it will pan out in the
 4 future, but our recommendation also -- because
 5 they met with many more studies which suggest
 6 its effect is positive.
 7 DR. KENNEDY: May I make a comment?
 8 DR. BEKKER: Yes. Dr. Kennedy would
 9 like to comment as well.
 10 DR. KENNEDY: Right. Regarding the
 11 article Dr. Levounis has referenced in the
 12 September 2017 American Psychiatric Association
 13 Journal, it is data -- the investigators
 14 analyzed data from the National Epidemiologic
 15 Surveys on alcohol and related conditions which
 16 interviewed more than 43,000 American adults in
 17 2001 to 2002. Subsequently they were followed
 18 up, more than 34,000 of them, in 2004 and 2005.
 19 I would point out that this data then
 20 was collected more than ten years ago and the
 21 opioid crisis has significantly changed since
 22 then and there are many, many, many more users
 23 of opioids now.
 24 So although the study may have valid
 25 conclusions based on the data they reviewed,

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1 this type of study should be revalidated given
 2 the current situation we find ourselves in with
 3 the opioid crisis.
 4 Thank you.
 5 DR. BEKKER: Thank you.
 6 Members of audience, any comments?
 7 Mr. Miller?
 8 MR. MILLER: Briefly I would like to
 9 add that it was 2014 when the American Medical
 10 Association looked at the effects of the first
 11 13 states with medical marijuana laws. They all
 12 included general pain provisions. Unlike
 13 New Jersey, we started very bad perhaps with --
 14 as the 14th state, but in those 13 they found
 15 there was 24.8 percent reduction in the overdose
 16 death rate due to opioids.
 17 In New Jersey we have a thousand
 18 overdose deaths of opioids both prescribed and
 19 illegal and that would translate statistically
 20 to 250 lives that could have been saved.
 21 Now of course the American Medical
 22 Association, and rightly so, cannot attribute
 23 cause and effect to it. We cannot say this is
 24 what we will find, but when it happens in all 13
 25 states and it combines for a 25 percent

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1 reduction, people need to be reminded that it is
 2 an additional medicine, adjunct medicine, not a
 3 replacement medicine and The Coalition for
 4 Medical Marijuana for over 12 years now has
 5 heard literally thousands of stories about the
 6 reduction in the opioid abuse of people
 7 combining cannabis with it.
 8 So thank you for taking that into
 9 account. If we really are having the epidemic
 10 that we are, this could be the single most
 11 important thing going on and I regret to say,
 12 and you already know, you haven't heard this
 13 anywhere else in the state of New Jersey.
 14 So this is my only -- it's not being
 15 used. It's not being talked about. New Jersey
 16 does not mention this. So I hope that
 17 eventually it will work that you folks will bear
 18 fruit in New Jersey and we will be better off
 19 for it.
 20 So thank you very much.
 21 DR. BEKKER: Thank you, Mr. Miller.
 22 If there isn't any other comment, we
 23 will move on.
 24 (No response.)
 25 DR. BEKKER: No other comments.

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1 So next condition on our list is
2 Tourette syndrome. Tourette syndrome is a
3 neurological disorder which is characterized by
4 repetitive involved in movement and occasionally
5 verbal outbursts. There are no accepted
6 pharmacological treatment for this condition.
7 Also all kinds of medication been tried to treat
8 Tourette syndrome. Only neuroleptic officially
9 approved by FDA for treating Tourette syndrome
10 but treatment is not very successful. It's very
11 difficult to treat condition, very debilitating.
12 Underlying cause of Tourette syndrome
13 is relatively unknown, uncertain. However,
14 there are number of clinical reports. I found
15 12 peer-reviewed publications which suggests
16 that marijuana is helpful and we had, like all
17 of us probably remember, heartbreaking story
18 about mother who has 17-year-old kid, very
19 intelligent and smart, but depressed and lonely
20 simply because he cannot be in a normal
21 environment at school.
22 So based on this -- my review of the
23 literature and compelling stories, I would
24 recommend to approve cannabis for treatment of
25 Tourette syndrome.

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1 were I think 12 peer-reviewed publications that
2 were provided. An additional search that I
3 conducted as well actually proved that there
4 were clinical trials that actually established
5 that medical marijuana as a treatment for
6 Tourette's is clearly effective and based upon
7 that I recommend it to be used.
8 DR. BEKKER: Thank you, Dr. Johansen.
9 Dr. Kennedy.
10 DR. KENNEDY: Thank you.
11 Yes, Tourette's is a well-recognized
12 debilitating disabling medical condition that
13 frequently has its onset early in childhood. So
14 when this condition does affect an individual,
15 their entire life span can be affected including
16 the ability to be in conventional educational
17 settings and these -- some of these individuals
18 are so disabled by their condition, they cannot
19 be in standard schools, even in school settings
20 that have additional help. Because of the
21 particular nature of the condition, it often
22 makes other people feel uncomfortable and shun
23 them socially and so on.
24 The tics are involuntarily. They can
25 include vocalization that can be unpleasant to

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1 Dr. Johansen.
2 DR. JOHANSEN: Thank you, Dr. Bekker.
3 So there is no -- there is no one
4 primary medication or go-to drug that
5 practitioners use to treat this. So there have
6 not certainly been -- there's a varying approach
7 to how it's addressed.
8 There are also non-neuroleptical
9 approaches as well, therapeutic modalities which
10 may or may not be effective, but just as a
11 reminder, these patients with Tourette syndrome
12 have experienced -- their quality of life is
13 huge and depending upon most certainly where
14 they are in their life span, whether they're
15 adolescent, young adults or older adults or
16 someone who's in their -- or an older adult,
17 they can -- will certainly have social
18 isolation, which is very, very common, which
19 then puts them in compliance with depression,
20 anxiety, you know, insomnia and so forth, and so
21 even when they do seek pharmacological
22 treatment, they indeed might have an
23 exacerbation of these symptoms merely as a side
24 effect.
25 So looking at the literature, there

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1 hear by other people and make people feel
2 uncomfortable. So these individuals are
3 frequently excluded from a variety of situations
4 that are necessary for them to grow and develop
5 and reach their potential.
6 The approved medication for
7 Tourette's syndrome falls into the category of
8 anti-psychotic medication, also known as
9 neuroleptics in some places. These medications
10 are actually not being used for psychosis.
11 Tourette's is not generally associated with
12 psychotic symptoms, but are being used because
13 of their effect on what we call the
14 extraforaminal system in the brain which
15 involves structures very deep in the brain, the
16 basal ganglia, which we know are implicated in
17 Tourette's syndrome although we haven't
18 identified the full etiology of the condition,
19 but sometimes these medications can suppress the
20 tic.
21 However, their efficacy is
22 questionable because they have much less than an
23 80 percent rate of tic suppression and given
24 that, because they have tremendous side effects
25 that are very adverse -- they can cause weight

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1 gain, metabolic syndrome, diabetes, stroke.
 2 They can cause other movement disorders. They
 3 can have serious cardiac affects that have to be
 4 monitored and they may cause drowsiness as do
 5 the SRRI, which are the anti-depressant class
 6 that is often used for these -- for this
 7 condition, but all of these medications,
 8 particularly the anti-psychotics can have very,
 9 very debilitating and sometimes dangerous
 10 medical adverse effects.
 11 So given the review of the literature
 12 and the number of clinical reports that
 13 describes the successful treatment of this
 14 condition by using cannabinoids and I reviewed
 15 12 peer-reviewed publications that were listed
 16 and there are letters of support from physicians
 17 and other licensed healthcare professionals
 18 knowledgeable about the condition, I concluded
 19 that medicinal cannabinoids, medicinal marijuana
 20 may be effective and should be considered for
 21 the use of this condition.
 22 DR. BEKKER: Thank you, Dr. Kennedy.
 23 Dr. Zarus.
 24 DR. ZARUS: Thank you.
 25 And all of my colleagues, I concur in

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1 the same direction. We heard that the condition
 2 itself, Tourette's is well-recognized, although
 3 we don't have clarity on how the neurologic
 4 system is causing Tourette syndrome. We're
 5 still unclear about the etiology of the
 6 condition itself, making it difficult for
 7 medication and the therapeutic toolboxes are
 8 relatively empty.
 9 You heard there's not really a go-to
 10 regimen made up of multiple drugs. There's just
 11 a few things out there. Only one FDA-approved
 12 therapeutic category, and for those of you who
 13 follow along with all these meetings, we had an
 14 opportunity to meet a young woman who gave a
 15 testimonial of not only the difficulty she's
 16 having handling the condition itself, but the
 17 quality of life and even other issues that have
 18 been brought up as her own personal condition of
 19 Tourette's.
 20 So it's really a quality of life
 21 issue. It's a condition for which there is
 22 some -- whether it's peer-reviewed data and
 23 literature, evidence to demonstrate the
 24 effectiveness and we should also look at the
 25 pharmacologic opportunity that the cannabinoid

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1 can present for us and we can deduct that this
 2 would be a reason why medicinal marijuana would
 3 be effective.
 4 So yes, I'm all for it with the rest
 5 of the team.
 6 DR. BEKKER: Thank you, Dr. Zarus.
 7 And Dr. Bridgeman.
 8 DR. BRIDGEMAN: So I just want to
 9 point out again my assessment was based on risk
 10 and benefit analysis and we do know that
 11 neurocognitive development continues up until
 12 age 25 years. So I am not a pediatric expert,
 13 but I did have some in looking at this therapy
 14 in regards to the developmental effects of
 15 cannabis on the developing brain. So that was
 16 one of the sort of risk aspects of my
 17 evaluation.
 18 You know, again, according to the
 19 compassion use of medical marijuana, as in
 20 New Jersey our state permits use of therapy or
 21 use of cannabis if the condition is resistant to
 22 or the patient is intolerant to conventional
 23 therapy and Tourette's syndrome in my mind falls
 24 in that category where we've heard from -- you
 25 know, my colleague said this is a condition

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1 where traditional therapy -- the traditional
 2 drug therapies don't often respond.
 3 When I look at the evidence, there is
 4 evidence that cannabis may be effective in the
 5 treatment of movement disorders including
 6 Tourette syndrome. The evidence dates back to
 7 the 1990s. There is individuals demonstrated
 8 that there's improvement in local functioning
 9 and tic varying scores when cannabis is
 10 utilized.
 11 There was a review in the Journal of
 12 the American Medical Association in 2015 that
 13 concluded that there was local quality evidence,
 14 but evidence nonetheless to support cannabis in
 15 improving symptoms associated with Tourette's
 16 and I would also point out that Tourette's is
 17 one of the medical indications for compassionate
 18 use of cannabis in the State of Minnesota.
 19 So in suggesting that this indication
 20 be considered by our Commissioner, the
 21 Department of Health, I think that there's
 22 enough evidence that I can comfortably conclude
 23 that this is an appropriate indication.
 24 DR. BEKKER: Thank you,
 25 Dr. Bridgeman.

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1 And Dr. Levounis.
 2 DR. LEVOUNIS: Yes, I agree with my
 3 colleagues about how debilitating is Tourette
 4 syndrome indeed and how the other treatments
 5 (indiscernible).
 6 On the second issue of the balance of
 7 the benefits and evidence to support the
 8 cannabis, I vote no on the second question.
 9 DR. BEKKER: Thank you, Dr. Levounis.
 10 Members of the audience, any
 11 comments?
 12 (No response).
 13 DR. BEKKER: Okay. So the next
 14 condition is one petition for requesting use of
 15 cannabis to treat asthma.
 16 Asthma is a respiratory condition
 17 which characterized by spasm in bronchi causing
 18 difficulty breathing and an extreme condition
 19 can lead to death. The onset of this disease
 20 actually is well understood and there are
 21 numerous available treatments that can alleviate
 22 these symptoms.
 23 I read the literature on the use of
 24 cannabis to treat asthma. I found lot of
 25 clinical studies, but unfortunately or

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1 Dr. Kennedy.
 2 DR. KENNEDY: Thank you.
 3 Yes, while asthma can be debilitating
 4 and indeed life-threatening in an acute
 5 exacerbation without treatment, there are well
 6 known and very effective treatments available
 7 for this condition and there are no clinical
 8 trials that I could find documenting usefulness
 9 of cannabis in this condition.
 10 So therefore I do not recommend it to
 11 the Commissioner for addition to the medicinal
 12 marijuana grouping.
 13 Thank you.
 14 DR. BEKKER: Thank you, Dr. Kennedy.
 15 Dr. Zarus.
 16 DR. ZARUS: Thank you.
 17 In addition to the lack of
 18 peer-reviewed data, there are no supportive
 19 healthcare professionals that recommended that
 20 we consider this. It doesn't seem to have
 21 anyone supporting the use and there is certainly
 22 no data. So I also concur that we should hold
 23 on this one until there's more evidence.
 24 DR. BEKKER: Thank you, Dr. Zarus.
 25 And Dr. Bridgeman.

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1 fortunately, I'm not sure, there's no clinical
 2 documentation of use of marijuana for asthma.
 3 It kind of doesn't make a whole lot of sense to
 4 me.
 5 So based on my review of literature
 6 and other ability of medication to treat this
 7 condition, my recommendation would be no.
 8 Dr. Johansen.
 9 DR. JOHANSEN: So I did go back to
 10 the literature as well. The triggers for asthma
 11 across the life span for pediatric and for
 12 adults and older adults, they are different from
 13 person to person, but there is evidence based
 14 and medically accepted and effective treatment
 15 for long-term control and for quick relief, for
 16 short acting relief that are both effective and
 17 provide minimal side effects, if any, and so I
 18 did go back to the literature to see if there
 19 were any clinical based trials that would
 20 suggest that marijuana would be an alternative
 21 modality to effectively treat asthma and I could
 22 not find anything to support that relationship.
 23 So I recommend that it not be used for this
 24 condition.
 25 DR. BEKKER: Thank you, Dr. Johansen.

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1 DR. BRIDGEMAN: Asthma is an
 2 absolutely debilitating condition and as a
 3 clinician working in the intake acute care
 4 setting, we see many adult patients with asthma
 5 exacerbation and we know despite the
 6 availability of a number of pharmacologic
 7 compounds, a significant portion of our patients
 8 who have asthma remains uncontrolled.
 9 That being said, there is also some
 10 evidence to suggest that there may be an
 11 anti-inflammatory effect of the cannabinoid.
 12 However, as was pointed out, this is
 13 pre-clinical evidence and by my assessment it's
 14 too soon to conclude that there's a role for
 15 cannabis in either reduction of exacerbation or
 16 in otherwise mitigating symptoms associated with
 17 asthma.
 18 I also want to just point out that
 19 inhalation of the byproduct of the combustion is
 20 one of the known triggers for asthma
 21 exacerbation. So with that regard, my
 22 assessment was no to expanding use for this
 23 indication.
 24 DR. BEKKER: Thank you,
 25 Dr. Bridgeman.

<p style="text-align: right;">Page 66</p> <p>1 And Dr. Levounis. 2 DR. LEVOUNIS: I fully 100 percent 3 agree with my colleagues that asthma can be 4 debilitating, but I vote no on the second 5 question of whether it should (indiscernible). 6 DR. BEKKER: Thank you, Dr. Levounis. 7 And members of the audience, anybody 8 would like to comment on our recommendation? 9 (No response). 10 DR. BEKKER: Okay. So our next and 11 last condition, we had one petition for -- 12 requesting medicinal marijuana to treat chronic 13 fatigue syndrome. 14 Chronic fatigue syndrome is a 15 debilitating condition which is characterized by 16 extreme fatigue, tiredness. It does not go away 17 with rest and cannot be explained by underlying 18 medical conditions. 19 The cause of chronic fatigue syndrome 20 is not clearly understood and there are no 21 current treatment. People just try whatever is 22 possible and each affected person has different 23 symptoms. It's kind of difficult to develop 24 general kind of recommendation. 25 So I reviewed the literature on use</p>	<p style="text-align: right;">Page 68</p> <p>1 expanded -- an indication in New Jersey. 2 DR. BEKKER: Thank you, 3 Dr. Bridgeman. 4 Dr. Zarus. 5 DR. ZARUS: And I'm also concluding 6 that we should hold on this. There's not enough 7 evidence and while again conventional therapy 8 doesn't really fix it, which would otherwise 9 make me think this is valuable for patients, in 10 this particular case we still don't have enough 11 information to be able to say that. So... 12 DR. BEKKER: Thank you, Dr. Zarus. 13 Dr. Kennedy. 14 DR. KENNEDY: Yes, thank you. 15 I concur with my colleagues. I was 16 unable to find any clinical evidence that 17 medicinal marijuana or cannabinoids could be 18 helpful in this condition and although this 19 condition has been researched for nearly 30 20 years quite extensively by various groups, there 21 is really not yet a good elucidation of the 22 etiology of this condition and why people have 23 it or what treatment would be helpful. 24 Many patients use other adjunctive 25 complementary therapy; yoga, acupuncture,</p>
<p style="text-align: right;">Page 67</p> <p>1 of medicinal marijuana for treating this 2 syndrome. I could not find any clinical studies 3 which address this disease, indicating 4 conceptually it's very -- neurologically it's 5 very difficult for me to imagine how or explain 6 how cannabis can help alleviate this symptom. 7 So based on this fact, my recommendation is no. 8 So let's go the other way around so 9 we kind of equalize forces. 10 Dr. Bridgeman. 11 DR. BRIDGEMAN: Sure. And I'm really 12 just going to echo Dr. Bekker's comments here. 13 We know that chronic fatigue syndrome is -- the 14 treatment approach is largely tailored to the 15 patient's presenting symptoms and just with 16 regard to the fact that the pathophysiology that 17 explains this disorder hasn't been completely 18 elucidated or current treatment options are 19 largely palative and symptom triggered, I also 20 found no evidence to support the use of cannabis 21 for this particular condition at this time and, 22 again, even from a pathophysiologic 23 pharmacologic approach, kind of couldn't 24 rationalize that as well. 25 So I concluded that it should not be</p>	<p style="text-align: right;">Page 69</p> <p>1 etcetera. However, I conclude that there is not 2 any sufficient evidence to expand medicinal 3 marijuana use in New Jersey to chronic fatigue 4 syndrome. 5 DR. BEKKER: Thank you, Dr. Kennedy. 6 Dr. Johansen. 7 DR. JOHANSEN: I want to concur with 8 my colleagues and yes, I could not find any 9 evidence to support this and I guess on behalf 10 of the panel I want to make sure that we 11 recognize that this is a medical condition and 12 there is an issue in that there are most 13 certainly physical, psychological, debilitating 14 associated symptoms that are related with this. 15 However, in order to support the use of 16 medicinal marijuana to treat this and be able to 17 modify symptoms, there has to be some evidence 18 to support that. 19 So I voted again with my colleagues 20 that there was nothing there to support that at 21 this time. 22 DR. BEKKER: Thank you, Dr. Johansen. 23 And Dr. Levounis. 24 DR. LEVOUNIS: I agree with my 25 colleagues that chronic fatigue is a very</p>

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1 debilitating medical condition, but I don't find
 2 the profile of medicinal cannabis to be in favor
 3 of sufficient -- sufficient evidence in favor of
 4 yes. So I vote no.
 5 DR. BEKKER: Thank you, Dr. Levounis.
 6 And members of the audience, if
 7 anybody would like to comment on chronic fatigue
 8 syndrome.
 9 (No response).
 10 DR. BEKKER: So no comments. So I
 11 just need to ask members of the panel if in your
 12 deliberation or public comment, you change your
 13 view on the petitions, and I guess you have to
 14 state for the record. Dr. Bridgeman?
 15 DR. BRIDGEMAN: I have not changed my
 16 views.
 17 DR. BEKKER: Dr. Zarus?
 18 DR. ZARUS: I have not changed my
 19 views.
 20 DR. BEKKER: Dr. Kennedy?
 21 DR. KENNEDY: I have not changed my
 22 view.
 23 DR. BEKKER: Dr. Johansen?
 24 DR. JOHANSEN: I have not changed my
 25 view.

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1 DR. BEKKER: Dr. Levounis?
 2 DR. LEVOUNIS: I have not changed my
 3 view.
 4 DR. BEKKER: And I did not change my
 5 view.
 6 So our deliberation did not change
 7 our recommendation, our initial recommendation.
 8 So initial recommendation stands as -- as
 9 presented and depicted on the web site. So our
 10 recommendation stands.
 11 Any other procedural issues?
 12 (Dr. Bekker confers with Ms. Carson.)
 13 DR. BEKKER: Okay. Members of panel,
 14 next vote refers to -- I guess second vote to
 15 confirm our initial recommendation.
 16 DR. BRIDGEMAN: Second.
 17 DR. BEKKER: Yes.
 18 DR. ZARUS: Second.
 19 DR. BEKKER: Yes.
 20 MS. JOHANSEN: Second.
 21 DR. BEKKER: Yes.
 22 DR. KENNEDY: Second.
 23 DR. BEKKER: Yes.
 24 Dr. Levounis.
 25 DR. LEVOUNIS: Second.

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1 DR. BEKKER: Yes. Okay.
 2 Any other procedural...
 3 MS. CARSON: So he just went through
 4 the roll for you.
 5 MS. STARK: Okay.
 6 DR. BEKKER: So if nobody else --
 7 MS. CARSON: Procedurally then -- she
 8 took Dr. Bekker's roll call as hers.
 9 MS. STARK: Yeah.
 10 MS. CARSON: That's fine.
 11 DR. BEKKER: So if there are no other
 12 comments, is there motion to adjourn?
 13 DR. KENNEDY: So move.
 14 DR. ZARUS: Second.
 15 DR. BEKKER: Okay. Thank you
 16 everybody for your participation. Members of
 17 the panel, thank you so much.
 18 (The proceedings are adjourned
 19 at 11:37 a.m.)
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C E R T I F I C A T E

1
 2
 3 STATE OF NEW JERSEY)
 4 : ss.
 5 COUNTY OF HUNTERDON)
 6
 7 I, BETH RADABAUGH, a Certified
 8 Shorthand Reporter and Notary Public within and
 9 for the State of New Jersey, do hereby certify
 10 that the within is a true and accurate
 11 transcript, to the best of my ability, of the
 12 proceedings taken on October 25, 2017.
 13 I further certify that I am not
 14 related to any of the parties to this action by
 15 blood or marriage; and that I am in no way
 16 interested in the outcome of this matter.
 17 IN WITNESS WHEREOF, I have hereunto
 18 set my hand this 3rd day of December, 2017.
 19
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 21
 22
 23
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 25

Beth Radabaugh
 BETH RADABAUGH, CSR
 LICENSE NO. 30X1002#2500

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