

EXHIBIT B

**STATE OF MICHIGAN
IN THE CIRCUIT COURT FOR THE COUNTY OF OAKLAND**

**TITUS JERMAINE CROMER, JR., BY HIS
HEIR AT LAW LASHAUNA LOWRY,**

**Case No. 19-177547 -CZ
HON. HALA JARBOU**

Plaintiff,

v.

**BEAUMONT HEALTH,
Defendant.**

RASOR LAW FIRM, PLLC

By: James B. Rasor (P43476)
Attorney for Plaintiff
201 E. 4th Street
Royal Oak, MI 48067
248-543-9000
jbr@rasorlawfirm.com

BROOKS WILKINS SHARKEY & TURCO PLLC

Michael R. Turco (P48705)
Michael T. Price (P57229)
401 S. Old Woodward Ave., Suite 400
Birmingham, Michigan 48009
Ph. (248) 971-1800
turco@bwst-law.com
price@bwst-law.com
Attorneys for Defendant

AFFIDAVIT OF PAUL A. BYRNE, M.D.

I, Paul A. Byrne, M.D., being first duly sworn, deposes and states, that I am over eighteen (18) years of age. I am competent and capable of making this Affidavit. I have personal knowledge of the facts set forth herein and such facts are true and correct to the best of my ability, and if called to testify, I can so state.

1. I am Paul A. Byrne, M.D., a physician licensed in Missouri, Nebraska and Ohio. I am Board Certified in Pediatrics and Neonatal-Perinatal Medicine. I have published articles on "brain death" and related topics in the medical literature, law literature and the lay press for more than thirty years. (Attached is my CV.) I have been qualified as an expert in matters related to central nervous system dysfunction in Michigan, Ohio, Virginia, New Jersey, New York, Florida, Montana, South Carolina, and Nebraska.

I have reviewed the provided medical records of Titus Jermaine Cromer Jr., Birthdate August 19, 2003.

2. Titus Jermaine Cromer Jr. is a 16-year-old boy who was admitted to Beaumont Royal Oak Hospital, 3601 W 13 Mile Rd Royal Oak, MI 48073-6712, on 10/17/2019 after cardiac arrest.

3. On admission Titus Jermaine Cromer Jr. had an ET and was on a ventilator. A cervical spine collar was in place. His heart had a normal rate, regular rhythm and normal heart sounds. He had normal breath sounds. His abdomen was soft without mass. There was normal range of motion of his arms and legs. He was unresponsive. His skin was warm and dry.

4. Report of CT of his head: No acute intracranial pathology. CT of Cervical spine report: Minimal C4-5 widening of the disc space and right facet. Further evaluation recommended with MRI.

5. On 10/17/19, Neurologic: Anoxic brain injury, pain control. ECHO cardiogram showed Ejection Fraction was 70%.

6. Gift of Life (GOL) (Organ Procurement Organization) notified on 10/17/19 in note of Paras Khandhar, MD.

7. EEG 10/19 - Diffuse severe encephalopathy, no epileptiform activity.

8. Repeat HCT 10/20- loss of gray-white matter differentiation, remains in frontal and parietal lobes. Loss of basal cisterns. Imaging consistent with anoxic injury, affecting pons and supratentorial structures, generalized cerebral edema. -

Titus was on:

Fentanyl 25 mcg q2hr PRN breakthrough pain-
Keppra 1 g q12 hr. Received loading dose 20 mg/kg in PICU.-
Versed 2 mg IV q1hr PRN seizure-
Will consider formal brain death evaluation on 10/24.

9. Patient was declared brain dead on 10/24/19 at 1500. The apnea test: unable to complete due to instability at both First and Second Exam.

10. Brain SPECT scan on 10/24/19 are scintographically consistent with a diagnosis of brain death but not sufficient onto itself to be diagnostic of it.

11. Titus Jermaine Cromer Jr. is on a ventilator. The ventilator only pushes air into the lungs of Titus Jermaine Cromer Jr. His lungs and chest push air out. Respiration occurs because his lungs, circulation, and beating heart are functioning. Interdependent functioning of many of Titus Jermaine Cromer Jr.'s organs, including liver, kidneys, pancreas, etc. occurs because he is alive.

12. Titus Jermaine Cromer Jr. has normal temperature without a warming device.

13. On 10/24/19 Titus Jermaine Cromer Jr. was started on thyroid medication (Levothyroxine 20 mcg followed by 10 mcg per hour. These were started without blood tests to evaluate his thyroid. At the request of Titus Jermaine Cromer Jr.'s mother on 10/27/19, 3 days after start of thyroid medication TSH, T3, and T4 (thyroid tests) were done.

14. TSH was 0.07 (Ref Range 0.4- 4.50 mIU/L). TSH is present indicating function of hypothalamus. It is low because he was already on thyroid, which makes TSH decrease. It is to be expected that TSH was higher before thyroid medication and could have been within normal range, which would be indicative that Titus Jermaine Cromer Jr.'s hypothalamus, a part of his brain, and his pituitary are functioning. Thus, Titus Jermaine Cromer Jr. does not fulfill "cessation of all functions of his entire brain."

15. On 10/27/19 Titus Jermaine Cromer Jr.'s thyroid functions were: Free T3 <1.0 (ref range 1.7 - 3.7 ng/mL). T3 is the active form of thyroid and is low and in the "Flag range." This indicates dosage should be increased.

16. On 10/27/19 Free T4 0.9 (ref range 0.7 - 1.5 ng/dL). This is at the low end of normal range. Mother requested increase in dosage, which was denied.

17. Thyroid function is necessary for heart and brain functioning, as well as other bodily functions.

18. Thyroid screening tests, TSH, T3 and T4, are commonly done prior to administration of thyroid medication. Levothyroxine (thyroid medication) was started on 10/24/19 at 0345, prior to declaration of "brain death" on 10/24/19 at 1500. Thyroid medication was lifesaving.

19. Low T3 and T4, barely within normal range, indicates need for increased dosage of Levothyroxine or start T3. Repeated testing of T3 and T4 are indicated until they are within normal range. Thyroid hormone is necessary for cardiac function and breathing centers in the brain of Titus Jermaine Cromer Jr.

20. Titus Jermaine Cromer Jr.'s blood has TSH because his brain produces TRH (Thyrotropin-Releasing Hormone), although TRH has not been directly measured in Titus Jermaine Cromer Jr.'s blood. TRH (Thyrotropin-Releasing Hormone), is produced in the hypothalamus, a part of the brain. TRH stimulates the release of thyroid-stimulating hormone (TSH) from the pituitary.

21. TSH has a half-life of approximately one hour. Thus, Titus Jermaine Cromer Jr. has been producing TRH and TSH continually.

22. Titus Jermaine Cromer Jr.'s brain is receiving enough blood for functioning of his hypothalamus. Thus, Titus has a functioning brain.

23. Titus Jermaine Cromer Jr. does not require a warming device to maintain his body temperature. After death the temperature of a cadaver equilibrates to room temperature. Titus Jermaine Cromer Jr. is not a cold corpse. His body temperature has not equilibrated with the environmental temperature as it would have, if Titus Jermaine Cromer Jr. were a corpse.

24. If image scans are not sensitive enough to detect circulation to his hypothalamus, they are not sensitive enough to detect circulation in any other part of Titus Jermaine Cromer Jr.'s brain. Other parts of his brain may be only functionally silent due to the lack of higher levels of energy they need to work compared to the level of energy that hypothalamic cells require to produce TSH but still functionally recoverable if proper treatment is given.

First conclusion: image scans are inadequate to confirm irreversible damage to the whole brain.

Second conclusion: if hypothalamus is working, his hypothalamus, which is part of Titus's brain is alive and the criteria for the legal concept of "whole brain death" is not fulfilled.

Third conclusion: because TSH is not produced in sufficient amounts, T3 is low and T4 is at low range of normal, thus Titus Jermaine Cromer Jr. possibly has brain myxedema. If T3 and T4 are given adequate dosage, brain circulation can only increase and resume normal levels, thereby restoring normal neurological functioning. Titus Jermaine Cromer Jr. has generalized swelling over his body. Some of this can be due to secondary hypothyroidism.

25. Titus Jermaine Cromer Jr. has an endotracheal tube (ET) and is dependent upon the ventilator to keep him alive. Tracheostomy is commonly done when an ET tube has been in place for about 2 weeks. Tracheostomy is necessary for long term care outside of an ICU and hospital and required to wean from ventilator.

26. Titus Jermaine Cromer Jr. did not receive nutrition other than glucose after admission to hospital on 10/17/19. He was deprived of protein, fat and vitamins until 10/28/19. These needed to have been started immediately. Titus Jermaine Cromer Jr. was starved until

nutrition was started via gastric tube. A PEG would be a better way to take care of Titus Jermaine Cromer Jr and it would be the standard of care for longer term care.

27. With proper medical treatment Titus Jermaine Cromer Jr. is likely to continue to live and may find limited to full recovery of brain function and may possibly regain consciousness.

28. Titus Jermaine Cromer Jr. has a beating heart without support by a pacemaker or medications. Titus Jermaine Cromer Jr. has circulation and respiration and many interdependent functioning organs including liver, kidneys and pancreas. Titus Jermaine Cromer Jr. is a living person who passes urine and has many normally functioning organs as manifest by laboratory test results that are within normal limits. These are functions that do not occur in a cadaver after true death.

29. Patients in a condition like Titus Jermaine Cromer Jr.'s clinical state may indeed achieve total or partial neurological recovery provided that they receive treatments based on recent scientific findings (although not yet commonly incorporated into medical practice).

30. The criteria for "brain death" are multiple and there is no consensus as to which set of criteria to use (Neurology 2008). The criteria supposedly demonstrate alleged brain damage from which the patient cannot recover. However, there are many patients who have recovered after a declaration of "brain death." Titus Jermaine Cromer Jr. is not deceased; Titus Jermaine Cromer Jr. is not a cadaver.

31. The latest scientific reports indicate that patients deemed to be "brain dead" are actually neurologically recoverable. I recognize that such treatments are not commonly done. Further it is recognized that the public and the Court must be wondering why doctors don't all agree that "brain death" is true death. Titus Jermaine Cromer Jr., like many others, continues to

live on a ventilator. Titus Jermaine Cromer Jr., like all of us, needs adequate thyroid hormone and nutrition.

32. The diagnosis of "brain death" is currently based on the occurrence of severe brain swelling unresponsive to current therapeutic methods. The brain swelling in Titus Jermaine Cromer Jr. began with the cardio-respiratory arrest that occurred on 10/17/19, more than 2 weeks ago. Progressive expansion of brain swelling raises the pressure inside the skull thereby compressing the blood vessels that supply nutrients and oxygen to the brain tissue itself. Upon reaching maximum levels, the pressure inside the skull may eventually stop the cerebral blood flow causing brain damage. However, Titus Jermaine Cromer Jr. almost certainly has not reached complete cessation of brain circulation and may achieve even complete or nearly complete neurological recovery if he is given proper treatment soon.

33. The questions presented here refer to (1) the unreliability of methods that have been used to identify death and (2) the fact that therapeutic methods that would enable brain recovery have not been used so far.

34. The brain of Titus Jermaine Cromer Jr. is probably being supplied by a partially reduced level of blood flow, insufficient to allow full functioning of his brain, such as control of respiratory muscles. Titus Jermaine Cromer Jr. had some TSH on 10/27/19, 3 days after levothyroxine (T4). T3 and T4 need to be repeated and given in adequate dosage.

35. In 1975, Joseph, a patient of mine, was on a ventilator for 6 weeks. He wouldn't move or breathe. An EEG was flat without brainwaves, which was interpreted by neurologists as "consistent with cerebral death." It was suggested to stop treatment. I continued to treat him. Eventually, Joseph was weaned from the ventilator, went to school and is now married and has 3 children.

36. The fact that Titus Jermaine Cromer Jr.'s brain still controls his temperature and produces thyroid stimulating hormone indicates that his brain is functioning and not irreversibly damaged. Rather, Titus Jermaine Cromer Jr. is in a condition best described in layman's terms as similar to partial hibernation.

37. By reestablishing the normal range of brain blood flow, recovery of his brain can be expected. In other words, he would regain consciousness and breathe on his own (without the aid of mechanical ventilation). That, however, cannot be accomplished by using only a ventilator and not giving better nutrition. Titus Jermaine Cromer Jr. indeed requires active treatment capable of inducing neurological recovery. Correction of other metabolic disorders may enhance his chances of recovery.

38. It is to be presumed that Titus Jermaine Cromer Jr. would have not wanted to be a donor of his vital organs or certainly only after being truly dead. In other words, would Titus Jermaine Cromer Jr. have wanted and agreed to have an incision from his neck to his pubis to remove his beating heart, lungs, liver, kidneys, pancreas and intestine while he is alive? After his organs would be excised, then he would be truly dead. It is my understanding that this is not his wishes or his parent's wishes.

39. Titus Jermaine Cromer Jr. has functioning of his lungs and heart, thus does not have cessation of circulatory and respiratory functions.

40. Titus Jermaine Cromer Jr. has normal temperature, blood pressure and thyroid stimulating hormone (TSH). Thus, it cannot be concluded that Titus Jermaine Cromer Jr. has cessation of all functions of his entire brain.

41. In a situation such as this where continued provision of life-sustaining measures such as a ventilator, medications including thyroid hormone, water and nutrition are at issue, it is

my professional judgment that the decision regarding their appropriateness rests with the family, not the medical profession.

42. Michigan Brain Death Statute is as follows:

“333.1033 Determination of death; conditions; accepted medical standards; persons authorized to pronounce death of person. [M.S.A. 14.15(1033)] Sec. 3. (1) An individual who has sustained either of the following is dead: (a) Irreversible cessation of circulatory and respiratory functions. (b) Irreversible cessation of all functions of the entire brain, including the brain stem. (2) A determination of death shall be made in accordance with accepted medical standards.”

43. Titus Jermaine Cromer Jr. condition does not fulfill either a) because he has circulatory and respiratory functions, or b) because he has a functioning brain as evidenced by TSH and his temperature has not equilibrated with the environmental temperature.

44. Now Titus Jermaine Cromer Jr. needs a tracheostomy and PEG tube to provide ventilation, nutrition and other treatments outside of an ICU.

45. The opinions I have expressed here are those I hold to a reasonable degree of medical probability and may be supplemented when I am able to read and study further medical records. If more records are provided, I will review them.

I declare under penalty of perjury that the foregoing is true and correct.

Paul A. Byrne, M.D.
Paul A. Byrne, M.D., Affiant

Subscribed And Sworn To Before Me,
a Notary Public, this 1st day of November, 2019.

Tamara Wuertz

Notary Public
Lucas, County, State of Ohio
(Acting In Lucas, County, State of Ohio)
My Commission Expires: Feb. 6, 2023

