

Thought Piece: The Ethics of Using Human Cell Lines in Medical Research and Development, a Biblical Perspective

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Author's Note

Like many pastors and community leaders, the COVID-19 pandemic forced me to ponder, investigate, and, most importantly, pray over a wide variety of pressing ethical decisions. Early in the pandemic, our elders and I sought God's direction for in-person gatherings, mask use, and other precautions. Now, in this most recent chapter of the COVID-19 pandemic as corporations, medical institutions, and government entities begin mandating COVID-19 vaccines, the ethical issues of their production have prominently surfaced.

As someone with a degree in chemistry, I hold the scientific community in extremely high esteem. I am trusting of and grateful to those that contribute to our society as researchers, doctors, and medical professionals. However, as a pastor and an adamant opponent of abortion, I have noticed readily available information on the COVID-19 vaccines is deceptive, manipulative, and skewed – or, at least, unhelpful to individuals that find themselves facing an ethical dilemma presented by COVID-19 vaccines produced with and/or tested on human fetal cell lines.

The goal of this body of research is to help an earnest seeker make an informed, personal decision about the ethical considerations of receiving one of the currently available COVID-19 vaccines. Those that (a) oppose abortion starting at conception and (b) uphold the Bible as a perfect, unequivocal moral standard have the most to gain from the following compiled thoughts and research.

My goal is to give you a framework for processing your ethical decision to receive / not receive the COVID-19 vaccine from a Biblical perspective and to offer you the spiritual "space" to hear God for yourself and proceed in faith and conviction.

– Pastor Jimmy Witcher

Abstract

Most Christians who believe God is the "giver of life" and the Bible is the moral standard for humanity also oppose elective abortion, beginning from conception. It is important for Christians who view abortion as sin to know the facts concerning human fetal cell lines and how they are used in the research and development of many drugs and vaccines including the current COVID-19 vaccines from Moderna, Pfizer and Johnson &

Johnson. Choosing to receive these vaccines – regardless of personal justifications – is making an ethical statement regarding the use of these human fetal cell lines.

Opponents of human fetal cell line research recognize accepting these drugs and vaccines encourages the medical community to continue to promote the normalization of abortion in society. Continued use of fetal cell testing as a standard in the medical research community promotes a “culture of death” unacceptable to God. The following research serves to inform and provide a framework for Christians seeking an answer from God on the ethical questions involved.

Introduction

Part of the human experience includes regularly making ethical decisions. The Christian approach to making decisions is two-fold: (1) Consult scripture, and (2) pray and listen to the “anointed utterance” of Christ. The ultimate standard for the Christian walk of faith is having the strength and courage to hear God, believe what he says, and, in faith, act in obedience to him.

“Faith, then, is birthed in a heart that responds to God’s anointed utterance of the Anointed One.”ⁱ (Romans 10:17)

“And without faith living within us it would be impossible to please God. For we come to God in faith knowing that he is real and that he rewards the faith of those who give all their passion and strength into seeking him.”ⁱⁱ (Hebrews 11:6)

The purpose of this document is to explore the ethical considerations of using human cell lines in pharmaceutical research and development. The recent release of COVID-19 vaccines and future booster shots has resurfaced this challenging issue. This paper aims to (1) educate the earnest seeker on the issues at hand, (2) provide a framework for processing these ethical considerations from a Biblical perspective, and (3) provide the spiritual “space” to hear God for themselves and proceed in faith and conviction.

Ethics is defined as “*the discipline dealing with what is good and bad and with moral duty and obligation*” and “*the principles of conduct governing an individual or a group.*”ⁱⁱⁱ In other words, ethics seeks to clarify what is “right” and what is “wrong” in the context of a functional society.

Individuals and groups of Christians often come to different ethical conclusions based on differing interpretations of the Bible. To those who disagree with my conclusions, it is my hope we may still walk in unity in the spirit of Romans 14:1, “*Offer an open hand of fellowship to welcome every true believer... refuse to engage in debates with them concerning nothing more than opinions.*”^{iv}

Background for Ethical Considerations

Medical doctors, researchers, and pharmaceutical companies daily push the limits of science seeking new ways to improve the human condition, extend life, overcome disease, and heal sickness. Their efforts have developed numerous pharmaceutical breakthroughs from the 1929 discovery of Penicillin by Scottish scientist Alexander Fleming to current day vaccines, antibiotics, pain relievers, blood pressure medications, et.al. But at what cost?

The ethics of using human cell lines in pharmaceutical development and production has been thrust into the spotlight with the COVID-19 pandemic and the available vaccines – namely Pfizer-BioNTech, Moderna, and Johnson & Johnson (which are, by far, the most common vaccines distributed in the U.S.)^v Both Pfizer and Moderna tested their COVID vaccines for efficacy using the HEK-293 fetal cell line, and Johnson & Johnson used the PER.C6 fetal cell line for both development and efficacy testing of their COVID vaccine.^{vi}

The sales of the Pfizer-BioNTech COVID vaccine are expected to reach “\$74 billion dollars through next year, excluding Germany and Belgium.”^{vii} Analysts project Moderna will “ring up \$35 billion...25% more sales than previously forecast.”^{viii} Johnson & Johnson anticipates their COVID vaccine sales to bring in “\$2.5 billion in revenue for the year.”^{ix} With financial analysts concluding, “The sums are further evidence the coronavirus pandemic is proving to be a significant moneymaking opportunity for vaccines, a business many drugmakers had abandoned because it was seen as requiring heavy investment while offering limited growth and carrying legal risks.”^x

Certainly, corporate profitability is not an ethical issue per se; however, it is important to recognize that the pharmaceutical and health care industry spends billions of dollars on lobbying efforts targeting both federal and state legislators. As the author of a recent study concluded in the Journal of the American Medical Association (“JAMA”), “An understanding of the large sums of money the pharmaceutical and health product industry spends on lobbying and campaign contributions can inform discussions about how to temper the influence of industry on US health policy.”^{xi}

The ethical questions at hand center around the use of these human cell lines in medical research and development. Most Christians hold to a Biblical worldview that is strongly “pro-life.”^{xii} These Christians believe human life begins at conception and termination of pregnancy via medically induced abortion constitutes a sin against God.

These beliefs lead to ethical questions concerning the use of human cell lines in medical and pharmaceutical research: Namely, do individuals who take vaccines, or any drug, developed using human cell lines derived from a medically induced abortion sin against God?

What are human fetal cell lines?

Biology Online defines a “cell line” as, “a permanently established cell culture that will proliferate indefinitely given appropriate fresh medium and space.”^{xiii}

As described in “The History of Vaccines,” “Cell cultures involve growing cells in a culture vessel. A primary cell culture consists of cells taken directly from living tissue ... contains only one type of cell in which the cells are normal and have a finite capacity to replicate. Cell strains can be made by taking subcultures from an original, primary culture until only one type [of cell] remains. ... An immortalized cell line is a cell culture of a single type of cell that can reproduce indefinitely.”^{xiv}

In short, immortalized human fetal cell lines are cultures of living cells taken from living tissue. They are manipulated in a lab to grow and reproduce indefinitely. They may also be further genetically modified creating cell sub-lines, but all trace their origin back to a single, living tissue sample.^{xv}

Human fetal cell lines are different from stem cells. Unlike fetal cell lines that are derived from, say kidney, lung, or retinal tissues, stem cells are “undecided” as to what type of cell they will reproduce and can be used by the human body or manipulated in a laboratory to grow into another type of cell. Stem cells can be ethically collected from, among other sources, umbilical cords and placentas donated following childbirth with the mother’s informed consent.^{xvi}

So, where did the original tissues used to create the human fetal cell lines come from?

Both Pfizer and Moderna utilized the HEK-293 fetal cell line in confirming the efficacy of their vaccines. Johnson & Johnson used the PER.C6 fetal cell line in both the efficacy testing and development of their vaccine.^{xvii} The vaccines themselves do not contain human cell lines.

The HEK-293 human cell line was derived from the kidney of a baby girl aborted in the early 1970’s in the Netherlands. (HEK stands for “human embryonic kidney” and the “293” represents the 293rd attempt to immortalize the cell line – that is to modify the DNA so that the cells reproduce indefinitely.) The PER.C6 line was taken from the retinal (eye) tissue of a baby boy aborted at 18-weeks in the Netherlands in the mid-1980’s. In both cases, the tissue samples were collected via vivisection – that is taken while there was still life in the body.

Little historical information is available on the HEK-293 baby; however, Dr. Alex van der Eb described the circumstances of the aborted baby boy used in creating the PER.C6 line saying:

“I isolated retina from a fetus, from a healthy fetus as far as could be seen, of 18 weeks old. There was nothing special with a family history or the pregnancy

[which] was completely normal up to the 18 weeks, and it turned out to be a socially indicated abortus', abortus provocatus [induced abortion], and that was simply because the woman wanted to get rid of the fetus...

... The mother was completely normal.... there was nothing wrong with the mother. She had at least two children afterwards in the same hospital in Leiden, which were completely healthy. The father was not known, not to the hospital anymore; what was written down [was there was an] unknown father, and that was, in fact, the reason why the abortion was requested.”^{xviii}

Why do researchers use human fetal cell lines from aborted babies instead of cells from consenting adults?

“Fetal tissue is a flexible, less-differentiated tissue. It grows readily and adapts to new environments, allowing researchers to study basic biology or use it as a tool in a way that can't be replicated with adult tissue,’ says Carrie Wolinetz, the NIH’s associate director for science policy.”^{xix}

In other words, fetal cells can be manipulated to reproduce indefinitely when other cells cannot. *“Using fetal tissue is not an easy choice, but so far there is no better choice,’ says [Lishan] Su, who has tried, and failed, to make a humanized mouse with other techniques. ‘Many, many biomedical researchers depend on fetal tissue research...’”^{xx}*

A common question is, “Why are tissues from aborted babies used in the development of fetal cell lines instead of tissues from miscarriages?” *“Around 80 percent of miscarriages occur in the first trimester ... [where the] genetic issues mean that the baby could not have survived outside the womb.”^{xxi}* The genetic issues causing the first trimester miscarriages disqualify the tissues for use in development of human fetal cell lines. Also as described above, the tissues used are collected while still alive. Miscarriages by nature are not planned, and the vast majority past 20 weeks are from stillborn births where the baby has already passed. While parents might honorably desire for some good to come from their tragedy, human fetal cell lines cannot practically be created from miscarriages.

Why do scientists use human cell lines in drug and vaccine testing and development?

The human genome is extremely complex and currently impossible to replicate. Researchers test new drugs and vaccines on human fetal cell lines rather than on people or animals. *“I get very frustrated when misinformed people go on about how it can all be done with computer models or cell cultures or stem cells or animals,’ says Paul Fowler, a reproductive biologist at the University of Aberdeen Institute of Medical Sciences, UK, ... ‘In some areas, the human is absolutely dramatically different than rodents.”^{xxii}*

Scientists use human cell lines because the cells are alive and behave accordingly. While the technology to propagate these cell lines exists, scientists cannot create live cells from scratch nor create a human cell line from adults or from animal cells.

Companies, such as Creative Biolabs, produce and bank human fetal cell lines for pharmaceutical research and development. ^{xxiii} The Biden administration recently lifted restrictions on the use of fetal tissue for medical research, reversing rules imposed in 2019 by President Donald J. Trump. ^{xxiv}

Ethics of Taking Drugs Developed with Human Cell Lines

Biomedical researchers use the immortalized human fetal cell lines in drug research and development *specifically* because the cells are alive, active, and reproducing. The human DNA, though minimally modified, is directly traceable back to the aborted babies' organs from which they were sourced.

A common question on the issue of abortion is, "When does life begin?" Is it when the baby has a heartbeat? Has brain functionality? Can survive outside the womb? Legislators have tried to answer this question by limiting abortions by age of the unborn baby with 43 states limiting abortions "*after a certain point in pregnancy.*" ^{xxv} Texas recently passed the "Heartbeat" law "*that bans most abortions after six weeks of pregnancy*" ^{xxvi} when a heartbeat is detectable.

Most pro-life Christians believe life begins at the moment of conception. The United States Conference of Catholic Bishops' fact sheet states, "*the union of sperm and egg at conception produces a new living being that is distinct from both mother and father. Modern genetics demonstrated that this individual is, at the outset, distinctively human, with the inherent and active potential to mature into a human fetus, infant, child and adult.*" ^{xxvii} Scientist can artificially fertilize an egg in a lab, but they cannot create life. Only God creates life. We honor God when we honor the life he creates.

"Then the Lord God formed the man from the dust of the ground. He breathed the breath of life into the man's nostrils, and the man became a living person." ^{xxviii} (Genesis 2:7)

King David beautifully described the process of DNA strands from a mother and father being knit together creating new life, when he wrote:

"You made all the delicate, inner parts of my body and knit me together in my mother's womb. Thank you for making me so wonderfully complex! Your workmanship is marvelous—how well I know it. You watched me as I was being formed in utter seclusion, as I was woven together in the dark of the womb. You saw me before I was born. Every day of my life was recorded in your book. Every moment was laid out before a single day had passed." ^{xxix} (Psalm 139:13-16)

Accepting as Biblical truth that (1) God alone creates life, and that (2) he is personally and intentionally involved at conception does not directly address the ethical questions at hand. As previously stated, most Christians believe abortion is morally wrong. But, is using a human cell line derived from the living tissues of an aborted baby wrong? And, is taking a drug or vaccine developed from, produced with, and/or tested on these human cell lines morally wrong?

This paper focuses primarily on the current COVID-19 vaccines; however, numerous other drugs and vaccines are produced utilizing human fetal cell lines. The ethical considerations are identical, but opponents of the use of human cell lines in drugs and vaccines would do well to educate themselves on other medications produced with them.

Proponents & Opponents of Drugs and Vaccines Produced with Human Cell Lines

I address these ethical considerations using a “proponent” / “opponent” format. By providing opposing points-of-view, my prayer is that this information will assist you in hearing God for yourself on the ethical considerations surrounding the use of human cell lines in drug development. “Proponents,” as used here, are individuals who believe it is morally right to take drugs and vaccines produced with these human cell lines. “Opponents” believe it is morally wrong to take drugs and vaccines produced with human cell lines. I move forward with this discussion offering two important notes:

First, I wish to state my personal position. I share my position with you here; so, you can factor my bias into your processing of this information. I am an opponent of using drugs and vaccines developed from human cell lines. I am also an opponent of using these cell lines in medical research and development. The reasons for my personal beliefs are expressed in the “opponent” sections stated below.

Second, I encourage you not to rush past this issue. We often skip hard questions of life due to the effort required to gain understanding and develop our own beliefs. We rely on trusted “experts” to do the thinking – and feeling – for us. Trusting vested leaders is not in itself a bad thing; however, true convictions can only come when we put in the work and the prayer required to establish our own personal firm foundation of faith.

I have been guilty of this myself. For decades, I’ve known there are some “out there” issues involving cell lines and medical research. Only recently did I invest the time and energy needed to get educated on the issue and seek God for his word to me personally. If you have read this far into this paper, I applaud you for investing in this journey for yourself.

Proponents believe that while abortion is a sin, using fetal cell lines derived from the aborted fetus saves countless lives. The belief that, “If some good can come from such evil,” then it is morally acceptable. As this perspective goes, “millions are saved by the

one that was sacrificed.”

Opponents believe that taking drugs or vaccines developed from human fetal cell lines and, thereby benefiting from the life taken, makes them morally complicit with the abortion itself. “Two wrongs do not make a right!” It is not morally justified to take a baby’s life to potentially save any other. Opponents believe any benefit gained from someone else’s decision to end a baby’s life connects them to that choice and is thus morally wrong.

Proponents often compare the sacrifice of Christ, giving his life for the salvation of the world, to the babies’ sacrificed lives to produce drugs and vaccines that proprot to aid humanity.

Opponents recognize Jesus willingly gave his life up for the salvation and redemption of all humanity. Jesus is God. Aborted babies are the creation of God made in his image and are not given an opportunity to make the choice for themselves.

Proponents note that, “*Although the original cell that resulted in the cell line was derived from an abortion, the current cell lines have multiplied many times – it is not the original tissue.*”^{xxx} These cell lines are distant from the original tissues from which they were derived and thus it is morally acceptable.

Opponents recognize that while the fetal cells have been multiplied many times over, they still carry the DNA fashioned by God in the womb. Scientist are using the fetal cell lines *because* they are alive. These cells still carry the “breath of life” given by God at conception. If the single cell formed at conception represents “life,” then the cell lines, regardless of how many times reproduced, carry that same life. Therefore, experimentation utilizing these cells is tantamount to experimentation on the person and is morally unacceptable.

Proponents believe the fetal cell lines were developed from abortions where the mothers gave explicit permission for the aborted fetuses to be used in such a manner. This perspective concludes that a biological mother has the right to determine how an aborted baby’s body is used, and as such, it is morally right to use them.

Opponents acknowledge that the mothers gave permission; however, the babies themselves, as individuals created by God, *did not*. This perspective concludes that babies are human from conception and have specific rights unto themselves. The Nuremberg Code and the U.S. Ethical Codes & Research Standards^{xxxii} provide significant protection for human subjects in medical research. Doctors have the ethical responsibility to obtain “informed consent”^{xxxii} before any medical treatments are performed. Unborn infants are clearly unable to provide such consent and therefore, the use of their body parts and cells is sinful and morally wrong.^{xxxiii} (Parents who have chosen to donate their child’s organs following a tragic death are encouraged to see this endnote.^{xxxiv})

Proponents reference the Vatican's 2005 approval of the use of vaccines created using fetal cell lines. Specifically, the Pontifical Academy for Life Statement says, "*if [the population is] exposed to considerable dangers to their health, vaccines with moral problems pertaining to them may also be used on a temporary basis.*"^{xxxv} Clearly COVID-19 is a world-wide pandemic bringing "considerable danger to health," and thus it is morally right to receive a vaccine. Speaking specifically about the new COVID-19 vaccines, the Vatican states it is, "*morally acceptable to receive Covid-19 vaccines that have used cell lines from aborted fetuses in their research and production process.*"^{xxxvi}

Opponents would counter that a more complete reading of the 2005 Pontifical Academy statement is necessary to get a full picture of the Vatican's views. Specifically, the statement notes that persons involved in, "*the preparation, distribution and marketing of vaccines produced as a result of the use of biological material whose origin is connected with cells coming from fetuses voluntarily aborted, such a process is stated, as a matter of principle, morally illicit, because it could contribute in encouraging the performance of other voluntary abortions, with the purpose of the production of such vaccines.*"^{xxxvii} "*It is up to the faithful and citizens of upright conscience (fathers of families, doctors, etc.) to oppose, even by making an objection of conscience, the ever more widespread attacks against life and the 'culture of death' which underlies them. From this point of view, the use of vaccines whose production is connected with procured abortion constitutes at least a mediate remote passive material cooperation to the abortion, and an immediate passive material cooperation with regard to their marketing.*"^{xxxviii}

The Vatican ethics study was conducted in 2005 in response to the rubella (German measles) vaccine. The Vatican was very concerned with the ongoing research utilizing human cell lines. While the Vatican gave its moral approval of the COVID vaccines, they asserted their approval does not "*imply a moral approval of the use of cell lines proceeding from aborted fetuses.*"^{xxxix}

Opponents note that the Vatican's concerns of a "culture of death" are well founded as the National Institutes of Health (NIH) continues to provide grants to researchers producing a "fetal organ bank" taken from "*full-term fetuses expelled during elective abortions.*"^{xl} For example, the University of Pittsburg received a \$3.2 million grant in 2015 to "*harvest organs from at least five fetuses a week between the ages of 6 and 42 weeks gestation. Babies born as young as 24 weeks gestation can survive outside the womb and 42 weeks is two weeks beyond the average gestation period.*" Opponents conclude that the Vatican's concerns in 2005 were valid and that government and pharmaceutical manufacturers have continued to propagate the "culture of death." Thus, the production and use of the current vaccines is morally wrong.

What Next?

I encourage you to pray through these ethical considerations and ask the Father directly, “Is it morally right to get one of these vaccines?” He is faithful and will answer his children.

“So it is with your prayers. Ask and you’ll receive. Seek and you’ll discover. Knock on heaven’s door, and it will one day open for you. Every persistent person will get what he asks for. Every persistent seeker will discover what he needs. And everyone who knocks persistently will one day find an open door.” ^{xli} (Luke 11:9,10)

“My own sheep will hear my voice and I know each one, and they will follow me.” ^{xlii} (John 10:27)

If you hear the Lord say, “Yes,” then I encourage you to speak with your doctor about your specific case and proceed as directed. If the Lord says, “No,” and you have not received the vaccine, then I encourage you not to get one. If your employer or other entity is mandating the vaccine, you can apply for a religious exemption. Visit Liberty Council (lc.org) for more information. If you hear the Lord say, “No,” and you have already received the injection, then you can repent and receive his full grace and pardon. Regardless of your standing, my prayer is that you consider this information carefully, pray faithfully, and proceed in faith under the direction of the Father.

“If we claim that we share life with him, but keep walking in the realm of darkness, we’re fooling ourselves and not living the truth. But if we keep living in the pure light that surrounds him, we share unbroken fellowship with one another, and the blood of Jesus, his Son, continually cleanses us from all sin. If we boast that we have no sin, we’re only fooling ourselves and are strangers to the truth. But if we freely admit our sins when his light uncovers them, he will be faithful to forgive us every time. God is just to forgive us our sins because of Christ, and he will continue to cleanse us from all unrighteousness. If we claim that we’re not guilty of sin when God uncovers it with his light, we make him a liar and his word is not in us.” ^{xliii} (1 John 1:6-10)

“Then if my people who are called by my name will humble themselves and pray and seek my face and turn from their wicked ways, I will hear from heaven and will forgive their sins and restore their land.” ^{xliv}
(2 Chronicles 7:14)

End Notes

ⁱ Romans 10:17; The Passion Translation®. Copyright © 2017 by Passion & Fire Ministries, Inc. Used by permission. All rights reserved. [thePassionTranslation.com](https://thepassiontranslation.com)

ⁱⁱ Hebrews 11:6; The Passion Translation®. Copyright © 2017 by Passion & Fire Ministries, Inc. Used by permission. All rights reserved. [thePassionTranslation.com](https://thepassiontranslation.com)

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^{iv} Romans 14:1; The Passion Translation®. Copyright © 2017 by Passion & Fire Ministries, Inc. Used by permission. All rights reserved. [thePassionTranslation.com](https://thepassiontranslation.com)

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^{vi} Newsroom; Liveaction.org; December 24, 2020; “What you need to know about the COVID-19 vaccines”; <https://www.liveaction.org/news/what-you-need-know-covid-19-vaccines/?fbclid=IwAR0COqAPBNi7UDiVm9TdRuXUDKP3xz9EBTWfgrF29BBqqmMmcACnKB-xfZk>

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^x Schwartz, Felicia; Aug. 19, 2021; “Moderna Expected to See Billions More in Sales”; *The Wall Street Journal*; <https://www.wsj.com/articles/boosters-pfizer-moderna-vaccine-sales-11629368306?page=1>

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xxxiv Many who have experienced the tragic, sudden death of a child have chosen to donate their child’s organs so other’s might live. These children did not have the opportunity to give “informed consent.” The difference between accidental death and abortion is that the parents did not *choose* to end the life of their child.

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xxxvi The Vatican News; December 21, 2020; “Vatican CDF Says use of anti-Covid vaccines ‘morally acceptable’”; *Vatican News*; <https://www.vaticannews.va/en/vatican-city/news/2020-12/vatican-cdf-note-covid-vaccine-morality-abortion.html>

xxxvii Catholic Medical Association; May 2019; “Pontifical Academy for Life Statement: Moral Reflections on Vaccines Prepared from Cells Derived from Aborted Human Foetuses”; *The Linacre Quarterly*; National center for Biotechnology Information; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6699053/>

xxxviii *ibid*

xxxix xxxix The Vatican News; December 21, 2020; “Vatican CDF Says use of anti-Covid vaccines ‘morally acceptable’”; *Vatican News*; <https://www.vaticannews.va/en/vatican-city/news/2020-12/vatican-cdf-note-covid-vaccine-morality-abortion.html>

xl Standing for Freedom Center Staff; August 6, 2021; “University of Pittsburgh received an NIH grant to harvest organs from, in some cases, full-term fetuses delivered alive”; *Standing for Freedom Center*; <https://www.standingforfreedom.com/2021/08/06/university-of-pittsburgh-received-an-nih-grant-to-harvest-organs-from-in-some-cases-full-term-fetuses-delivered-alive/>

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