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Management in quantum revenue architectures for EPC probability modelling of travaux preparatoires on corporate crimes based on economic legal fiction of excise tax

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Abstract
Every government system follows the principle of ultimate powers in divided authorities responsible to promote public welfare and safety through constitutional practice of economic freedom. Pharmacoeconomics deals with cost-effective analysis in alignment with administrative functions of the government in relation to ethical behavior of private companies to comply with the rules and regulations expressed by the legislation and its comparative parliamentary legal system for guidance and control of appropriate ethical conduct as advocated by warranty issues of intellectual property. The intended design of PDE-5 inhibitors for marketing their products for public use as medication is indicated in their patent registration as strict compliance of advocating patient safety. Public funds are used by the government to advocate cost-effective analysis in pharmacoeconomics. Therefore, direct taxation of product services and practice of health promotion must be properly addressed and coordination in aligning the institutional goals with employment law for proper compliance of handling patented products. Furthermore, indirect taxation based on public funds must resolve issues concerning taxes collected from private companies handling patented drug products with clear specification of intended design for patient efficacy and safety.
Corporate Governance is a conceptual framework of business designs intended to illustrate the various activities of a company towards fulfilling its profit goals as private stakeholder and contributing to public interests for social obligation of sustainable development. Disclosure of corporate social responsibility is the central mechanism of corporate governance. Based on stakeholder theory, corporate governance strongly influences corporate social responsibility disclosure to enhance the relationship of stakeholders and its business community. Tax aggressiveness is utilized by board director and its members to lessen tax contribution which is contrary to the government sector goals of maximizing tax impositions for public welfare and safety. Unlawful behavior on tax aggressiveness is known as tax evasion while tax avoidance is not a violation and serves as a loophole to the taxation system. UNCITRAL model law is a legal arbitration concept of making "commercial" expand to other comparable jurisdiction of international trade. The European Patent Commission is the legal authority that delineates medical policies from patented products. Travaux preparatoires is a design practice within legal context of restricted jurisdiction for commercial exercise of strict liability. This paper aims to develop arbitration framework based on stakeholder theory of corporate governance to explain the correlation of tax planning with patented products and medical processes involving therapeutic, surgical, and veterinary policies. Therefore, tax evasion is not apparent criminal behavior and tax planning on medical policies and patented drugs must have a separate strategic means of increasing monetary success for tax avoidance to be clearly managed by the company.

Keywords: corporate governance, corporate social responsibility, tax aggressiveness, travaux preparatoires, excise tax

1. Introduction
1.1 Facts of the issue
In the United States, dysfunction of male erection, termed as impotence which disturbs 30 million people, tends to weaken the erectile maintenance to attain adequate satisfaction of sexual intercourse. Its degree varies from a partial erectile decline to a complete failure.
The common basis of erectile dysfunction (ED) is the inadequacy of blood flow in the arteries. This type of disorder is known as corporal veno-occlusive mechanism which impairs and interferes the arterial system leading to inability to maintain erection due to failed blood trap and fluid impediment [1].

On the 27th of March 1998, the US Food and Drug Administration approved Sildenafil citrate for marketing the first oral drug known to inhibit phosphodiesterase type 5 intended for ED treatment in more than 120 countries worldwide. Following 7 years of approval, many physicians have prescribed sildenafil for men in treatment of ED [2].
Its 1998 introduction strengthens a novel tool for sex therapy to widen the ED treatment of many people. This drug quickly qualified to be the primary treatment for sexual dysfunction replacing all other means [3].

1.2 Procedural history
From the period of 1901 to 2000, pharmaceutical transactions, also termed as pharmacoeconomics, has engineered various constitutional freedom of monetary success for public welfare and safety as it gained a lot of importance together with the legislative body to provide cost-effective medications. The population growth alarmed the community, as well as the drug manufacturing companies, to develop and innovate economical medicines aiming to control the problems associated with human diseases aside targeting the constitutional rights of its citizens. Hence, the increasing complexity of effective and cheap medicines in various conditions influenced the government system to create ways towards its constitutional purpose for public utilization [4].
The relevant global practice of politicians and healthcare professionals towards patient safety is constitutionally promoted to follow the utilitarianism doctrine of evidence-based medicine advocating its clinical practice guidelines. However, presumptions from its therapeutic levels of hierarchy using various allied health interventions did not meet some of its encountered challenges. Pharmaceutical marketing requirements for wide trade use have strict registration compliance, hence, the stage for randomized clinical trials (RCTs) is obligated to document the registration criteria for drug efficacy proving patient safety of manufactured medicines promoting product quality with legal guarantee following the authorized socio-legal protocols validated by daily monitoring [5].

1.3 Judgement
There are two (2) research methods to evaluate the impact of pharmacoeconomics. First is the quantitative usage of scientific areas using visualization maps on the grounds of bibliometric evaluation, known as the scientometric examination? Second is the provision of the quantitative publication summaries, termed as bibliometric examination. In healthcare industry and its innovations, scientometric examination has been widely used to practice its relevant disciplines.
The constitutional purpose of drug therapy lies on the branch of pharmacoeconomics dealing with cost-effect analysis of health economics. Its relevant purpose promotes the practice of pharmacoepidemiology resulting to waste reduction of various resources. Today, pharmacoeconomics has more than 40 health policy publications across several countries for inclusion of its analytic methods, yield indicators, and economical processes [6].

1.4 General Summary
UNCITRAL Model Law for Arbitration Framework is vital to separate medical policy from patent design using tax planning development based on European Patent Commission following a theoretical framework of corporate governance for addressing loopholes in white-collar crimes bound for tax law compliance.

1.5 AIMS
Corporate Governance is facilitated by various conceptual frameworks towards fulfillment of sustainable developmental goals crucial in advocating diplomacy in dispute settlements. Leadership and management skills must be exhibited using decision-making proficiencies governed by knowledge management of the institution harmoniously aligned with other intergovernmental agencies designed to promote public welfare and safety. The cultural perception of social responsibility from the corporate practice is the reiteration of its code of conduct based on regulatory policies of administrative functions in compliance of the community of stakeholders to follow principles pertaining to business law and its ethics for observance of citizen protection of their relevant constitutional needs and rights. Bill of rights is a constitutional amendment in communication of the needs of its people to be healthy and free of risks from any medical practice deemed to be unconstitutional in terms of white-collar crime. This paper aims to develop a commercial arbitration framework concerning legal, ethical, and regulatory issues pertaining to white-collar unlawful behaviors in terms of taxation system in relation to warranty issues. Hence, business modelling aims to tackle regulatory and policy issues on sustainable development as integrated with tax planning for separation of medical policy from its product design warranty problems based on corporate social responsibility. Furthermore, this paper is designed to address issues concerning the universality of commercial law in terms of international trade law jurisdiction, the employment of patent products emphasizing the practice of medical professions in handling services of administrative policies and processes involving medical treatments for humans and animals, and financial dispute settlement pertaining to separate tax aggressiveness for compliance of European Patent Convention.

2. Methodology
2.1 Research theories
The principle of corporate governance must exhibit efficient company earnings using effective management practice in fulfilling the standards of company value as these determinants are crucial for competent monetary performance, hence, tax reductions should not be the sole focusing line on profit increment. Social responsibility is the center and plays a key role in promoting business communication to execute financial goals and public interests. Competencies involved in corporate management includes not only tax expense adjustments, but also, operational reduction costs such as administrative expenditures, extensive product designs, and expansive customer services. Hence, criminal offenses related to tax evasion are considered as violation towards inclination to tax minimization and up to the extent of net income increment. Moreover, the board director plays an important role in tax expense deceleration for corporate governance facilitation of company value, thus, the size and depth of organizational business system is associated with the mechanism efficiency of corporate governance. Furthermore, corporate governance significantly affects tax

aggressiveness based on its mechanism. Its principle is widely exercised to reduce tax expenses in a proficient means of exhibiting expertise in management, ingenuity in tax handling, and sincerity in economic purpose resulting to monetary success of the organization while avoiding perpetrating tax evasion. According to tax law, deductibles are allowable items being applied to revenue expenses as expression of strategic tax aggressiveness. Hence, when there is tax reduction in operational costs, return of investment is higher that earnings are apparent for a fixed time duration. Thus, attacking tax aggressiveness strategically to lower down tax expenses may result to unwanted tax avoidance which can taint company image [7].

Corporate Governance is associated ideally with Corporate Social Responsibility Disclosure (CSRD) in terms of stakeholder theory in aiming to improve the ties of stakeholders with public organizations for legitimacy of purpose as shown in Figure 1. Business relationships are not restricted within the context of private firm in which employees, investors, and members of the board must the only people to interact with, rather company reputation must be established public performance and disclosure as part of strategic means of increasing market profit. Hence, CSRD must exhibit and meet public expectations as their strategic response to business community [8].

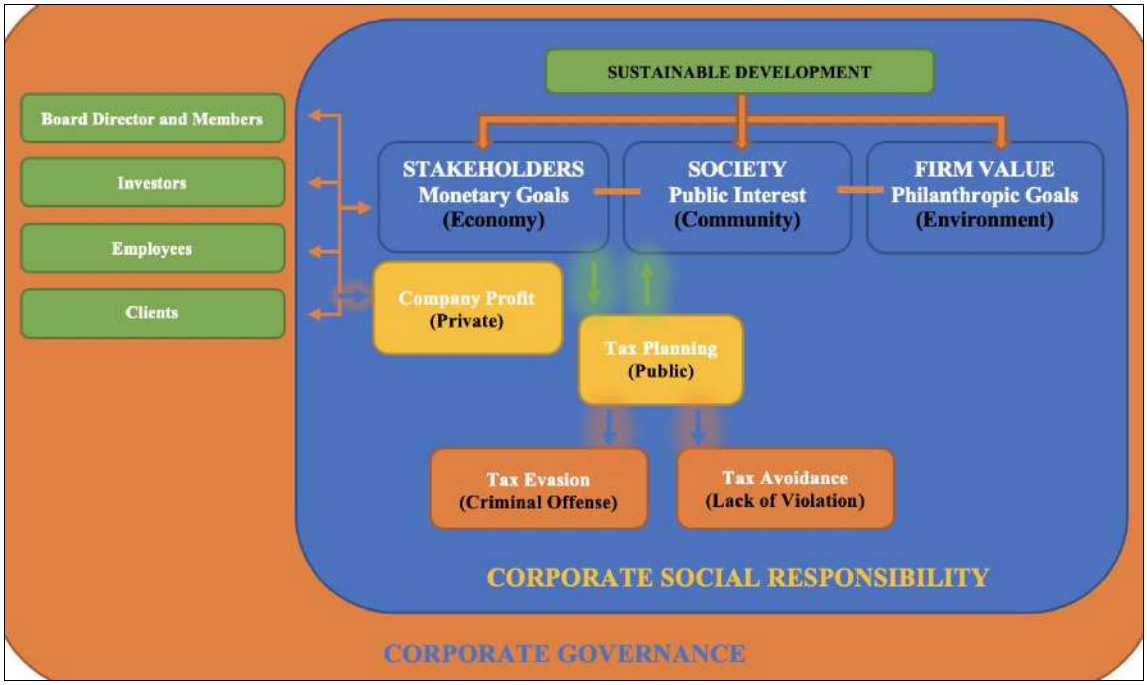

Fig 1: Business Modelling Arbitration Framework

2.2 Procedural Law

Economists have debated for several years to restrict manufacturers in the market in an appropriate means that would impose court penalties against any forms of breach or violation. A manufacturer who violated in any means of its quality assurance and control is deemed to perpetrate breach in either implied or express warranty, or to perform fraud. An express warranty is a clear contractual obligation subject to court sanctions for any modes of breach that would encompass its approved complete specification. Manufacturers may adjust the range of warranty for appropriateness of its clinical assessment. Lacking express warranty, courts ensure its compliance for its declared intended design [9].

The US FDA approved sildenafil for treating pulmonary arterial hypertension (PAH) designed for improvement of ability to exercise and deferment of clinical exacerbation in adults. Its approval is intended for adults, while the off-label use of sildenafil has augmented its design in infants [10].

The regulations being implemented and enforced in U.S. Food and Drug Administration (FDA) involving supervision of development of novel medicines are designed to be in strict compliance. To pass the strict compliance of FDA, manufacturers should demonstrate safety and efficacy data evidence as matter of fact concerning their submitted drug to the regulatory agency with requirements of conducting long and well-funded studies for facilitation of pre-clinical, non-clinical wet investigations, and animal testing, as well as clinical phases of drug research involving human as subjects also termed as clinical trials. Before granting the company its requested market approval, the FDA orders manufacturers to comply with their requirements of filing new drug application (NDA), for rendering FDA assessors with all the vital information needed to confirm whether the applied drug is effective and safe for its proposed usage and that the risks involved are very minimal to be noticed by the consumer.

The application of off-label use of medicines are indicated as employment of drugs beyond or outside the evaluation of manufacturer being submitted for FDA approval. As part of FDA review, the regulatory agency examines the documented adverse drug reactions or events that were known during the stages of clinical trials, as well as any possible and potential drug side effects. Assessors depend on this drug information to critically review whether the documented labeling language is suitable for the novel medicine, and if not, what inclusions for labelling must be added. Furthermore, it is crucial that FDA assessors evaluate this data as corroborated and consisted with the matter of fact as evidence from clinical trials to warrant issues of claims that is printed on the drug label [11].

3. Discussion

3.1 The legislation

The U.S. legislation passed Federal Food, Drug and Cosmetic Act of 1938, also known as FD&C Act or "Act", and upon this enactment, the executive branch created U.S. Food and Drug Administration (FDA) which was given the duty and obligation to warrant with specialized function to control the handling of biologics, pharmaceuticals, and medical devices designed for human safety with ensured efficiency. Under this Act and its supplementing amendments, the FDA was assigned to supervise the official capacity of the new medicines in terms of its marketing power based on research and development of pharmaceutical industries, and the duties of prescribing physicians and their medical practices were outside the responsibility scope of FDA. The restricted function maintenance of the FDA, in terms of not controlling the medicine practice of prescribing doctors, has been complied by the administrative agency throughout its complexed and long legislative history of promoting "Practice of Medicine Exception."

However, the U.S. legislation does not clearly stated and discussed that they exclude to oversee the medical duties and obligations of physicians in prescribing medicines in the enactment of FD&C Act of 1938 with subsequent amendments, although it is clear that FDA enforces strict compliance of authority in terms of regulating drugs in the market, and the Congress believed that the original purpose of the Act was for FDA not to cause any interference while doing medical procedures and treatments in physician-patient relationship. It is presumed for this reason that doctors, in majority of their contact with their patients, do off-label medication practice as healthcare policy.

In 1996, there are two (2) guidance documents published: (1) Guidance to Industry on Dissemination of Reprints of Certain Published, and (2) Original Data and Guidance for Industry Funded Dissemination of Reference Texts. These guidance papers were summarized as information to appropriately explain and disseminate their purposive function on unapproved usages of approved medicines. Under Section 401 of the 1997 Food and Drug Administration Modernization Act (FDAMA), these guidance documents were subsequently incorporated to meet aggressive opposition of the pharmaceutical firms, as law would strongly demand afterwards to produce changes in their drug data dissemination practices and be obliged to provide supplemental corroborating study information concerning application of new drugs to the FDA.

Unfortunately, before the U.S. legislation passing of 1998 FDAMA, there is a conservative-leaning business advocate group named as Washington Legal Foundation (WLF), who filed a case against the authority of FDA in claim of its guidance papers and its subsequent problems in regulations attesting that it was unconstitutional based on the violating grounds pertaining to the U.S. Constitution and its First Amendment. The U.S. District Court under the jurisdiction of Columbia favored WLF and decided for a permanent order of conduct restraint in reversal of law rendering FDA's authoritative functions on WLF be invalid. After the ruling, the FDA clarified the standpoint of their regulatory agency and stated that a "safe harbor" is indicated in rendering FDAMA provisions to manufacturers under Section 401 and that the dissemination of peer-reviewed scientific and medical journal articles explaining unapproved usages of their medicines would not be perceived contrary to their office as misbranding law violation.

There is an important turn of occasions as observed in FDA ruling on an appeal in a dismissal case from the U.S. District Court of Appeals that rejected the plea of FDA and cancelled the judicial opinions and injunctions of District Court only to the degree of declaring their continuing medical education (CME) advice, and FDAMA as unconstitutional. This divided authoritative decision led to the FDA retention of its right to provide reasons in utilization of promotional aids, such as references and reprints that are distributed beyond the "safe harbor" of the FDA, serving as material of fact as proof in misbranding or enforcing the intended use of its design as action evidence. At the same instance that manufacturers maintain their rights to use the First Amendment of the U.S. Constitution to raise issues with the government in possible cases which can be filed against them.

Currently, in Section 401 of FDAMA and its supplemental regulations in FDA are no longer effective for legal actions. The FDA enforces legal compliance based on its existing statutory legal function and its accompanying authoritative guidance is primarily enforced from prosecutor tools against pharmaceutical industries who perpetrate misbranding or marketing their approved drugs as "off-label" medicines [11].

3.2 Legal System

The Food, Drug, and Cosmetic Act (FDCA) of US federal states provides legal authority to FDA in resolving several public health issues. The crucial problem is the clear evidence that off-label prescriptions can convey substantial dangers due to inadequacy of clear documentation leading to risks for patients. Hence, allowing to advertise this type of off-label performance could result drug producers to infringe the market with subjective details of insufficient support resulting to diversion of prescription practices. In the acknowledgement of some unallowed off-label communication, the FDA has listed secured protection for producers: answering unnecessary issues from doctors, disseminating peer-reviewed journals, documenting its purposes, and promoting legal medication practice through continuing professional education. In the past 30 years, however, a hundred billion dollars in criminal and civil sanctions have been compensated by approximately all major drug firms for supporting off-label engagement beyond restricted jurisdictions resulting to questionable outcomes for patients in each scenario.

In 2016, the 21st Century Cures Act permits producers to render healthcare details for economic purposes concerning usage of off-label medicines to formulary committees that aid insurers in deciding for its coverage of drugs. Such entities have more access than sole doctors to assess critically raised issues despite of its substantial refinement range across the US trade. During March 2017 in Arizona, the Free Speech in Medicine Act passed a clear permission for producers to connect with several doctors regarding off-label practice. FDCA rendered this legislation to have a poor probability to sustain continuing legal risks concerning some unapproved practices. Hence, the Goldwater Institute may advocate its aim in support of restricting the capability of FDA to permit off-label practice due to mentioned legal harms.

In 2017, the US House of Representatives introduced two bills for the expansion of allowing the scope of off-label practice. The Medical Product Communications Act aims to make a novel secured protection of technical substitutes with physicians in connection to off-label practices in a condition that the advertisement is not deemed to promote naturally its information, the report is asserted with validated scientific facts and producers render suitable purposes from its mathematical algorithms of computer-aided designs following equational principles or rules governing various components of pharmaceutical engineering concepts. This bill strengthens the evidence that the producers' marketing representatives should communicate more usual with doctors in prescribing patented drugs for the reason of compliance with their aims of advertisement, not by its natural or official composition but with the permitted scope of off-label promotion, and through compliance, the legislation would permit clinical report distribution although the FDA's substantial proof of its performance standard would be inadequate due to incomplete specification from subjective and unreliable studies. The observed attempt in the 21st Century Cures Act for widening the scope of coverage insurance in relation to communications permits the producers, under the Pharmaceutical Information Exchange Act, to report clinical and pre-clinical data concerning unapproved designs to formulary committees about its scientific review could be an adequate anticipation to assist future approvals of FDA regarding some of its unapproved usage. Both bills are necessary for the producers to cover disclaimers regarding the scope of FDA for its unapproved designs of data, and there are also currently accessible disclaimers in the condition of advertisement claims without the approval of FDA concerning nutritional supplements in lack of its working demonstration [12].

Since 1979, the US legislation demanded pediatric information for the label of drug medicines and the Final Pediatric Rule on data observations for children is ordered in 1998. In 2002, the Best Pharmaceuticals for Children Act (BPCA) was made to stimulate 6 months of market restriction on given products being assessed through a written communication from a request of pediatric evaluation and the Pediatric Research Equity Acts (PREA) subsequently corroborated it. In Europe, the ICH Guidance 11 introduced Pediatric Regulation for facilitating evaluations of children population. It also mandates drug firms to perform clinical pediatric assessments based on an agreement in Pediatric Investigational Plan (PIP) in exchange of patent security for 6 months. This regulation is guided by documentation of several pediatric studies involving ethical behavior, project on risk management, choice formulation for children population, the drug development function of pharmacokinetics, and the product assessment in the population of neonates. It has been observed that there is a clinical research harmony of rules across the jurisdictions of United States, Japan, and Europe, but provisions or regulations for children are not yet perfectly coordinated or even established across all mentioned global territories [13].

3.3 Statutory interpretation

The European Patent Convention (EPC) emphasized the value of innovative research to pharmaceutical firms. Unfortunately, policy justifications removed patent protection involving mitigations based on medical research methods. Based on article 53(c) EPC 20002, its exclusion pertains to therapeutic and surgical methods of human and animal treatment, as well as its diagnostic practices. Hence, the products used for medical treatment are not considered as exclusions to remove their patent protection, as specified in their official declaration of therapeutic compositions. Hence, these substances used to heal people has restrained its patent rights over medical treatment justified policy exclusions, in such a way that refusing to acknowledge its second-use patents would result in innovation denial against its appropriate reward. Moreover, United Kingdom, Netherlands, and Denmark expressed paragraph 2(d) replacement at Article 50 with Article 52, under paragraph 5, stating that no provisions must be deemed as removing patent protection, consisting of its declared therapeutic substance intended as a treatment design away from making policies on medical, surgical, and diagnostic practices. Hence, United Kingdom clearly draws a line between product patentability and second-use design [14].

3.3.1 Tax planning development

There are logical debates in favor and contrary to legal formalism approach and judicial activism arbitration. Addressing gaps on parliamentary system and its accompanied legislative amendments fulfills the formalist duty of exercising the constitutional powers of the government. The public must feel the presence of the justice system for security ties of statutory interpretation, specifically when values are emphasized for public safety as to gain rightful intuitive outcome. Statutory interpretation is a judicial activism process of developing the right answer based on presumptions, rules, extrinsic materials, and written laws. It is illustrated as a hermeneutical circle since engineering deeper thoughts based on provisional interpretations is inclined for a different and lucid understanding of an innovative reasoning approach. Hence, using a mathematical principle, statutory interpretation [15] is expressed as the following equations to elucidate and show that medical policies must be equivalent with product designs to measure the financial transparency of tax reduction for public interests.

Based on the given statutory interpretation formula:

$$\text{ISSUE} + \text{RULES} = \text{OUTCOME} \tag{1}$$

Hence:

$$RULES = \frac{< \frac{WORDS}{CONTEXT} \times PURPOSE > - MAXIMS + PRESUMPTIONS}{EXTRINSIC\ MATERIALS = HISTORY + DEBATES + DICTIONARIES} \tag{2}$$

$$EXTRINSIC\ MATERIALS = \frac{< \frac{WORDS}{CONTEXT} \times PURPOSE > - MAXIMS + PRESUMPTIONS}{RULES} \tag{3}$$

$$EXTRINSIC\ MATERIALS = \frac{< \frac{WORDS}{CONTEXT} \times PURPOSE >}{RULES} - \frac{MAXIMS}{RULES} + \frac{PRESUMPTIONS}{RULES} \tag{4}$$

$$\frac{PRESUMPTIONS}{RULES} - EXTRINSIC\ MATERIALS = \frac{MAXIMS - < \frac{WORDS}{CONTEXT} \times PURPOSE >}{RULES} \tag{5}$$

$$\frac{PRESUMPTIONS - EXTRINSIC\ MATERIALS}{RULES} = \frac{MAXIMS - < \frac{WORDS}{CONTEXT} \times PURPOSE >}{RULES} \tag{6}$$

$$\frac{PRESUMPTIONS + <\frac{WORDS}{CONTEXT} \times PURPOSE>}{RULES} = \frac{MAXIMS + EXTRINSIC\ MATERIALS}{RULES} \quad (7)$$

$$PRESUMPTIONS + < \frac{WORDS}{CONTEXT} \times PURPOSE >= \frac{MAXIMS + EXTRINSIC\ MATERIALS}{RULES} \quad (8)$$

Equation (9) is shown below to explain development of tax planning. The exhibition of tax aggressiveness is directly proportional with patented product as uppercase shows strong financial evidence of commercial market value, while lowercase symbols illustrate possible sources of tax avoidance as commercial interests are restricted due to limited implementation of medical policies and regulations per country, thus, not a universal rule that can be comparable to another territorial jurisdiction by means of international law.

$$\Lambda + < \mathrm{K} \times \beta > = \frac{\tau + \alpha}{\theta} \quad (9)$$

Where:
$\Lambda = Uppercase\ lambda$
$\beta = Uppercase\ beta$
$\alpha = Lowercase\ alpha$
$\theta = Lowercase\ theta$
$K = Uppercase\ kappa$
$\tau = Lowercase\ tau$

Since

$$\Lambda = \frac{\tau + \alpha}{\beta} \frac{\partial\,(K)}{\partial\,(\theta)} \quad (10)$$

However, tax planning, in relation to statutory interpretation, did not exhibit relationship of equal ratio between medical policy and patented product. Equations (11) to (21) show that tax avoidance is generated when medical policies are used and employed in relation to patent products.

$$\text{TAX PLANNING} = \frac{DISCLOSURE\ +\ EPC}{PRODUCT\ DESIGN} \frac{\partial\,(\frac{SUBSTANCE}{UCC})}{\partial\,(TRAVAUX\ PREPARATOIRES)} \quad (11)$$

Since

$$\Lambda = \frac{\partial(K)/\beta}{\partial(\theta)/\tau + \alpha} \quad (12)$$

$$\text{TAX PLANNING} = \frac{\partial\left(\frac{SUBSTANCE}{UCC}\right)/PRODUCT\ DESIGN}{\partial\,(TRAVAUX\ PREPARATOIRES)/DISCLOSURE\ +\ EPC} \quad (13)$$

Hence

$$\Lambda = \frac{\partial\ \ln\beta}{\partial\ \ln\theta} \quad (14)$$

$$\text{TAX PLANNING} = \frac{\partial\ \ln PRODUCT\ DESIGN}{\partial\ \ln\ TRAVAUX\ PREPARATOIRES} \quad (15)$$

Since

$$\text{ISSUE} + \text{RULES} = \text{OUTCOME} \quad (16)$$

$$\text{ISSUE} = \text{RULES} - \text{OUTCOME} \quad (17)$$

Thus:

$$\Delta = \Lambda - \mathrm{X} \quad (18)$$

$$\text{POLICY} = \text{TAX PLANNING} - \text{PRODUCT DESIGN} \quad (19)$$

Where:
$X = Uppercase\ chi$
$\Delta = Uppercase\ delta$

Therefore:

$$\text{ISSUE} + \text{RULES} = \text{OUTCOME} \quad (20)$$

$$\text{TAX PLANNING} = \text{POLICY} + \text{PRODUCT DESIGN} \quad (21)$$

3.4 Case law

The Wall Street Journal documented that based on unknown sources federal prosecutors are in dispute to settle in an estimation of $1 billion from a six-year legal investigation of whether there was perpetrated promotion of off-label use of Risperdal® as antipsychotic medicine with Janssen Pharmaceutical Inc., a company of Johnson & Johnson (J&J), in May 13. Based from one of its sources, prosecutors are applying the case law of 2009 Eli Lilly settlement, involving $1.4 billion payment in relation to marketing Zyprexa® as antipsychotic drug, and this legal principle is used in resolving the case of Janssen company. Securities and Exchange Commission (SEC) filed, in April 3, and documented the subsidiary of J&J had confirmed reserve for potential monetary settlement concerning penalties that might be involved under Food, Drug and Cosmetic Act. The attorneys general of more than 40 states already filed or waiting to charge a suitcase against Janssen's actions demanding that the J&J subsidiary must repay them with civil penalties, Medicaid funds and other payments concerning off-label use of Risperdal® prescriptions [11].

3.5 Precedents

In the start of 1916, the case of MacPherson v. Buick Motor Co. initiated to permit act of negligence for sustaining lack of privity in a harmless and usual situation including occurrences of a product being negligently produced forming a risky result. Currently, privity is no longer required in claiming damages from personal harm in a negligent performance of a producer [16].

Lately, as settlements in marketing of off-label products are gaining immense attention in public media, it became apparent and ongoing as though its practice is widespread. The public perception, in general, among industries and media is that nothing much has caused great modifications, together with the participation of numerous famous government officials. Among other else, matter of fact as evidence suggests an increment in both violations and monetary penalties concerning unlawful off-label medicine practices in relation to marketing and promotional agendas.

Despite exhibiting efforts to comply with enforcement agencies, industries are open to be prosecuted several times together with the same or related violations. The Department of Justice cited some accused companies who committed regulatory offenses, such as the most recognized settlements of Eli Lilly and Pfizer in 2009. Although experts are in debate that this case has been greatly ineffective at practice curb of off-label marketing due to associated legal expenses and penalties which are lesser in comparison with the crime conviction of companies with apparent monetary earnings. Furthermore, as stock prices unavoidably decline after public announcements, it will not affect much, and the stock increment climbs up instantaneously. A federal prosecutor had stated, while in discussion with a reporter, his opinion regarding the takeaway of Pfizer from Bextra® settlement in 2009 that arguing with Department of Justice are perceived as expenses in running business transactions.

Federal prosecutors are concerned that their campaigns might not produce sufficient impact on this medical practice pertaining to off-label marketing even though their government, since 2006, had already acquired nearly $4 billion for this violation alone. The government lucidly augments the pressure by controlling people, like the chief executive officers (CEOs) and other corporate executives, who are personally liable for unlawful activities, as far as going to implement the "exclusion" authority of the Inspector General.

In a recent turning point of case discovery, Marc Hermelin, the former board chairman of K-V Pharmaceutical Co., was removed from federal health care program participation, since November 18, 2010, after a fully owned K-V subsidiary, Ethex Corp., invoked guilty for two (2) felony counts of alleged marketing of misbranded and adulterated drugs. This is recorded as the first case wherein the executive of a pharmaceutical firm was officially removed without crime conviction.

From 1997 to 2004, pharmaceutical companies are being reported under federal investigation in allegation of promoting nine (9) products as "off-label" medicines. On February 28, Elan Pharmaceuticals, a U.S. company subsidiary to Elan Corporation, PLC, as Irish drugmaker, pled guilty afterwards with finalized settlement reaching $203.5 million for agreement in December 2010 in relation with marketing Zonegran® as epilepsy drug. On March 10, Astra-Zeneca PLC has reach monetary settlement in lack of inclusion of admitting guilty. The company agreed to settle for a civil remedy of $68.5 million involving 37 states and the jurisdiction of Columbia was able to provide solutions concerning alleged promotion of off-label prescribing of Seroquel® as schizophrenia drug. For document purposes, this is the biggest multi-state, client protection-based pharmaceutical monetary dispute agreement to record, separated from other federal settlement worth $520 million concerning similar allegations being made to public in the previous year [11].

4. Literature review

4.1 Dicta

Penile erection can be initiated to begin via the three (3) major stimulatory pathways, in which two (2) of its sexual excitement trigger cyclic guanosine monophosphate (cyclic-3', 5' GMP) formation and are known to be the primary and secondary cGMP pathways, while the third arousing stimulation influences cyclic adenosine monophosphate (cAMP) formation.

The parasympathetic nervous system triggers the acetylcholine (Ach) release innervating nonadrenergic–noncholinergic (NANC) sensational impulses in the primary cGMP pathway manifesting visual or tactile arousal stimulation. NANC nerve cells and vascular endothelial cells discharge nitric oxide (NO) leading to guanylate cyclase enzymatic activation which is responsible for conversion catalysis of guanosine 5'-triphosphate (GTP) to primary and secondary cGMP stimulatory pathways. Specific protein kinases are activated by cGMP triggering the opening of potassium channels known as phosphorylation and closing of calcium channels termed as hyperpolarization. Hence, there is an apparent drop in intracellular levels of calcium simultaneously with relation of smooth muscles resulting to penile erection as its arteries dilate and veins are compressed for more blood stream supply to corpus cavernosa.

Moreover, the cAMP formation is catalyzed by the adenylate cyclase enzyme for manifestation of third arousal pathway resulting to cavernosal relaxation of smooth muscle and penile erection. Thus, the adenylate cyclase is triggered based on the following routes: (1) autonomic nerves synthesizing vasoactive intestinal peptide, (2) smooth muscles distributing prostaglandins (PGE1 and PGE2) via relaxation effect and adrenergic tone reduction as noradrenaline release is inhibited and through cAMP-dependent protein kinase and hyperpolarization, and (3) circulating or neural catecholamines (epinephrine and norepinephrine). In erectile dysfunction (ED), the isoenzymes of PDE5 are apparent for cGMP degradation that impedes penile erection due to insufficiency to accumulate adequate supply of intracellular sensational components [17].

There are three (3) cardinal symptoms as specified by the European Male Aging Study frequently to be associated with low testosterone levels, namely, erectile dysfunction, sexual arousal reduction and penile erection loss.

Testosterone performs a crucial role of process coordination and facilitation restricted within smooth muscles and vascular endothelium cells. Hence, two (2) independent pathways are triggered by testosterone for arterial functions [18].

From the record of United States, it is widely known that the FDA had no official approval of off-label" uses although physicians can legally write it in their prescriptions, and drug firms could not dynamically advertise their products for such purposes claimed to be used as an "off-label [12]."

4.2 Dissent

Since one court appeal has a slight chance of success, supporters have moved to federal and state legislatures to clarify current rules of FDA in connection with off-label practice, since these regulations are crucial for the FDA's ability to comply with its mission of performing its defined public health in terms of communicating with the advantages of drug usage lessening the harms against those with insufficient facts to warrant such design. These differences are important for sole prescribers in lack of expert time to conduct the same risky evaluation of clinical information done by high rated and skilled FDA scientists for their patients in possible exposure of insufficient facts

and potential risks for expensive off-label medicine practice [12].

Furthermore, in focus of political expression, participation on both Atlantic sides in the declaration of the Human Genome first draft fulfillment exhibits many opinions concerning the usage and information abuse that had been generated or could be made during the genome completion. With this common type of substantial innovations from engineering concepts, a lot of issues can be quickly resolved by through computational data systems aided with computer concepts. As a result, the outcome is merely a genomic sequence in representation of commands through quantitative and regulated details. Thus, the issues raised through the interest in computational biology, bioinformatics and systems biology are translated into a more beneficial information involving a more complicated task of data interpretation. Several wealthy nations have divided their budgets allocating some portions of it to novel insights of pharmacogenomics since massive developments in genomic designs must be pushed through along with its trade value in the market [19].

The biotechnology field that follows the combined concepts of bioinformatics and genomics through the pharmaceutical product development of pharmacogenomics is crucial for the study of genomic function. The computer-aided design (CAD) has shifted scientific developments from laboratory practices into digitization of data. Large collections of databases are evident to be advantageous in organizing genetic variations and ascertaining environmental determinants leading to identify which variants greatly contribute to sickness resulting to properly addressing of ethical and legal problems 15. Hence, personalized medicine has a lifetime goal of treating various people in a population in a safe, effective, and economical means16. Furthermore, systems medicine is a term pertaining to research methodologies designed for improving interpretation of biotechnology principles through the application of genome architecture, artificial intelligence and pharmacogenomics. Hence, pharmacogenomics is used for tailoring medicines in order to design a concept of "one size does not fit all [20].

Patent licenses are agreements in which a licensed firm usually shares or transfers the rights for use and later enhance a technology with another license firm in exchange of money. In this condition, the license holder commonly enjoys some versatility degree due to possibility of shelving the basic patent and expecting novel data without spending additional expenses. Shelving happens in the event that the license holder concludes to delay or stop the firm's investment in the marketing and development of licensed innovation. This may occur if the produced technology has lesser value or its market potential is highly unreliable [21].

The disclosure required in patent law is assigned to discuss information pertaining to a patented invention to permit proper invention usage and comprehension. There is an inherent incompatibility in patent law observed between genome technology and disclosure specification that impedes its full completion of desired goals. Its sources lie in the network of needed disclosure in which its presented result has a concealed presumption in patent law concerning the crucial concept of the intended components of the invention. In acknowledgement of this technological presumption, the issue is on its broader concept without restricting its generic sense [22].

It is crucial to extrapolate its design since there are only a few pulmonary arterial hypertension (PAH) therapies being targeted and strictly applied and observed in children. Hence, the US FDA exhibits an "off-label" use as an indication of its non-approval for pediatric treatment [23].

4.3 Party's Arguments

Pharmacoeconomics is defined by the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) as an area of discipline that examines the monetary behavior of drug services, products, and promotions for private and public utilization focusing on expenditures and results of clinical usage. In 1986, it was published in literature as Townsend's article emphasizing the importance of engineering its research agendas towards novel approach, and in 1992, a particular pharmaeconomics journal was introduced for healthcare legal system and its society.

Moreover, the increasing total health expenses gained attention to healthcare individuals to focus on cost-effective examination. Hence, the quality of healthcare goods and services must be in harmony with the constitutional rights of their citizens in advocacy of personal economic freedom promoting administrative health policies in mitigation of public welfare and safety. Thus, both disciplines must be constitutionally aligned in promoting efficiency as their principle must follow the pre-emptive doctrine of the U.S. Constitution comparable to other foreign trade laws related to its international rules and policies in commercial transactions.

There are restrictions that must be maintained in healthcare expenditures from various sources of equipment and materials allocating its infinite utilization. Thus, the obligatory provision of healthcare professionals is challenged to render optimized patient safety using cost-effective medicines to harmonize the registered norm of standard despite limited health-oriented resources. Hence, there is an increasing demand to advocate economic efficiency considering the importance of money for healthcare programs and interventions. Therefore, pharmacoeconomics serves as a crucial monetary principle in providing efficient and affordable treatment designed to resolve organizational goals in advocacy of administrative functions of the government.

As the complexity of business environment continues to grow and develop in expense of increasing demand of healthcare costs, private insurance companies are looking for economical evidence that is constitutional to corroborate decisions made in the contract purchase and inclusion of new medicines in the formularies. Hence, it is an obligation for drug manufacturers to weigh the medicinal value using cost-effective analysis. Meanwhile, government insurance companies, using public funds, serve as the third contracting parties paying the medical bills of their clients as patients with doctor's prescription indicating the drugs necessary for their recovery. Thus, pharmacoeconomics is the identified measurement for qualitative and quantitative analyses in comparison with the outcomes of drug services and products from clinical trials of drug development to marketing its approved production advocating economic clause for constitutional compliance as doctrine of pre-emption [24].

5. Conclusions

Pharmacogenomics deals with issues on personalized medicine based from its patented design in support of

clinical data sufficiency involving equation developments on kinetic control, computer-aided design (CAD), and body enzymes. As of the moment, the off-label use for pediatric treatment lacks not only with sufficiency of scientific documents for approval of its regulatory use but also with uncoordinated legal principles to official establish its safe usage for neonates across continents of Japan, Europe, and United States. Hence, medical peer-reviewed articles may be continuously done in order to address issues on pediatric safety of neonates for proper calling of all concerned authorities to legally establish an appropriate means of resolving these type of issues involving incongruity of passed legislations and administrative functions for official enforcement of its policies concerning safety and protection of neonates under an approved drug patent with a raised issue of an option for an alternative treatment, instead of an off-label use.

Pharmacoeconomics plays as the constitutional foundation of advocating public welfare and safety through cost-effective analysis of commercial transactions in promotion of monetary freedom. The practice of law is quite broad in nature since it would deal with various multi-disciplinary fields pertaining not only to several legal theories but also with various principles already established and being developed in domains of medicine and engineering. The application of legal scholarship is restricted to some law practices such as in court system and law firms since the compliance and adherence of its trained legal principles were all integrated from an academic institution that must be strictly followed to execute all that had been developed resulting to a strong tied up connection and excellent compliance of honed cognitive domains. However, political science is another field being covered by law practice to formulate various legislations for maintenance of both private and public interests aimed to regulate gaps found in the community practice, and for establishment of proper regulations. Some legal medicine peer-reviewed articles are academic publications aimed to document public safety and some of its scholarly works are deemed to be secondary authority explaining the constitution, statutes, administrative regulations, and other primary authorities. Unfortunately, some academic publications, although officially declared, document regulatory practices that are still deemed to be unconstitutional due to non-approval of an administrative office. Drug patenting is a legal research process to officially declare a trademark (Technical substitutes) from its complete specification gaining protection of intellectual property for legally marketing its product through its intended treatment although its mechanism of action is quite diverse that it may also be useful to some other therapeutic effects. If academic and practical principles must be strictly followed, hence, some off-label medicines must undergo the similar clinical trial process before it can be offered to public for proper compliance of safety due to well-established scientific facts and secured observation and protection that standard care of duty is properly followed beyond negligence. Gaining of intellectual property means is the most suitable method to address specific gaps of legal safety in which the academic advocacy of legal research process is properly complied. Therefore, direct and indirect taxation concerning the patented products handled by authorized professionals obligatory to comply with ethical issues of intellectual property in terms of handling services and health promotion practice must be properly coordinated and addressed for alignment of institutional goals of relevant and involved organizations advocating to enforce administrative functions as interpreted by the legislation and comparative parliamentary system for compliance of strict monetary goals of pharmacoeconomics based from clinical practice guidelines for perusal of legal authorities. It is suggested to render ways of strongly complying with taxation law relevant to handling of patented products for services and provided health programs as harmonized with registration criteria for patent approval of the intended drug design as a form of clear specification of its registered intellectual property for monetary profit on patent law.

Corporate Governance is a commercial design organized to exhibit the mechanism of sustainable development created to maximize the company earnings while reducing costs of revenue distribution. Stakeholder theory illustrates a tremendous association between corporate governance and disclosure of corporate social responsibility in terms of performing its philanthropic role of making its utmost profit through establishment of business communication relationship with its stakeholders and participating to contribute towards public interests. Taxes are public funds created and maximized by the government sector for public welfare and safety, and its aggressiveness must be exercised by the company for strategic approach of profit increment away from tax avoidance while preventing tax evasion as criminal offense. UNCITRAL model law is a legal product context intended to make commercial transactions comparable to any other state or country by means of universality of international law concerning patented designs, while travaux preparatoires is a legal approach to medical processes making its policy systems work within a defined and limited jurisdiction. The European Patent Commission is the official legal body that marks and indicates the differences of medical policies from patented products Therefore, engineering statutory interpretation for tax planning provided means of separating revenue distribution between medical policies and regulations, and utilization of patented products, hence, tax avoidance is cleared to separate profits made from medical policy services and patented product usage.

6. References

1. Goldenberg M. Safety and Efficacy of Sildenafil Citrate in the Treatment of Male Erectile Dysfunction. Clinical Therapeutics. 1998;20(6):1033-1048.
2. Padma-Nathan H. Sildenafil citrate (Viagra) treatment of erectile dysfunction: an updated profile and response and effectiveness. International Journal of Impotence Research. 2006;18(5):423-431.
3. Perelman M. FSD Partner Issues: Expanding Sex Therapy with Sildenafil. Journal of Sex and Marital Therapy. 2002 Feb 15;28(sup1):195-204.
4. Tomori G, Bacs Z. Application of cost analysis methods in pharmacoeconomic decisions. Economics and Finance. 2015 Jan 1;32:416-422.
5. Bodrogi J, Kalo Z. Principles of pharmacoeconomics and their impact on strategic imperatives of pharmaceutical research and development, British Journal of Pharmacology. 2010 Apr;159(7):1367-1373.
6. Liu Y, Bo Z, Liu D, Diao S, Yang C, Li H, *et al*. Trends and frontiers of research on pharmacoeconomics from 2012-2021: A scientometric analysis. Annals of Translational Medicine. 2022;10(6):327.

7. Obaretin O, Ogbeide SO. Corporate Governance Mechanisms and Tax Aggressiveness of Listed Firms in Nigeria. Amity Journal of Corporate Governance. 2018, 3(1).
8. Vandegrift D. Quality-Assuring Price and Breach of Express or Implied Warranty. Contemporary Economic Policy. 2001 Apr;19(2):186-196.
9. Dias A, Rodrigues LL, Craig R. Corporate Governance Effects on Social Responsibility Disclosures. Australasian Accounting, Business and Finance Journal. 2017, 11(2).
10. Perez K, Laughon M. Sildenafil in Term and Premature Infants: A Systematic Review. Clinical Therapeutics. 2015 Nov 1;37(11):2598-2607.
11. Repucci N. An Examination of Off-Label Marketing and Promotion: Settlements, Issues, and Trends. Journal of Healthcare Compliance. 2011 September-October Sep;13(5):15-21.
12. Sinha M, Kesselheim A. The next forum for unraveling FDA off-label marketing rules: State and federal legislatures. PLOS Medicine. 2018;15(5):e1002564.
13. Smith-Marshall P. Pediatric Trials: A World View. Applied Clinical Trials. 2010;19(1):32.
14. Ventose E. Patent Protection for Second and Further Medical Uses Under the European Patent Convention. Script ed. 2009;6(1):57.
15. Sanson M. Statutory Interpretation. (Oxford University Press, 2016) at pp 321-322. 2018;SAcLJ.;30:234.
16. Columbia Law Review. Purchaser Injured by Deleterious Agents in Advertised Product may Recover from Manufacturer for Breach of Express Warranty notwithstanding Absence of Privity of Contract; c1958.
17. Seftel A. Tadalafil: a long-acting PDE5 inhibitor for the management of erectile dysfunction. Therapy. 2004;1(2):185.
18. Aversa A, Francomano D, Lenzi A. Does testosterone supplementation increase PDE5-inhibitor responses in difficult-to-treat erectile dysfunction patients? Expert Opinion on Pharmacotherapy. 2015;16(5):625-628.
19. Dean P. Chemical genomics: a challenge for de novo drug design. Mol Biotechnol. 2007 Nov;37(3):237-245.
20. Fischer T, Brothers K, Erdman P, Langanke M. Clinical decision-making and secondary findings in systems. BMC Medical Ethics. 2016 Dec;17(1):1-2.
21. Leone MI, Oriani R, Reichstein T. How much are flexibility and uncertainty worth in patent licensing. Econ Polit Ind. 2015 Dec;42(4):371-394.
22. Cohen-Sasson O. A hidden technological assumption in patent law: The case of gene patents and the disclosure requirement. The Journal of World Intellectual Property. 2019 Nov;22(5-6):272-288.
23. Ezekian J, Hill K. Management and Pulmonary Artery Hypertension in the Pediatric Patient. 21, Current Cardiology Reports. 2019 Dec;21(12):1-1.
24. Ahmad A, Patel I, Parimilakrishnan S, Mohanta G, Chung H, Chang J. The role of pharmacoeconomics in current Indian healthcare system. 2(1), Journal of Research in Pharmacy Practice. 2013 Jan;2(1):3.