## Some Major FDA EUA/Approval Reforms Needed

With the goal of making them more scientific, the FDA needs a major overhaul of their <u>Emergency Use Authorization</u> (EUA) and <u>Approval</u> processes, particularly for:

- a) Vaccines (especially when a reasonable therapeutic is available).
- **b)** Therapeutics (e.g., <u>remdesivir and molnupiravir</u> should not have received EUAs).
- 1 The FDA needs to thoroughly revamp its concept and communication of efficacy, e.g.:
  - **a)** A requirement that all EUAs require <u>RCTs</u>, and that all RCTs (and subsequently the FDA) publicize <u>Absolute Risk</u> preferably, exclusively. [For a further discussion of Absolute vs Relative Risks, please see my <u>online commentary</u>.]
    - *Note 1:* This is consistent with an important <u>FDA advisory publication</u>. A key conclusion (*see page 60*) is that the public is: "unduly influenced when risk information is presented using a relative risk approach; this can result in suboptimal decisions. **Thus, an absolute risk format should be used**."
    - Note 2: The CONSORT 2010 Statement Updated Guidelines for Reporting Parallel Group Randomized Trials states: "... presentation of both absolute and relative effect sizes is recommended..."
  - **b)** The FDA should define a new term (e.g., *net effectiveness*). It will not only include Absolute Risk but also give some weight to other serious medical considerations like lethality, contagiousness, and side effects.
  - c) A minimum *net effectiveness* should be required (e.g., 50%) to be granted an EUA.
  - d) If after an EUA is granted, subsequent scientific studies indicate that the **net effectiveness** appears to have gone below the minimum required, then the FDA will promptly have a formal public hearing of their EUA. If the conclusion of the hearing is that there is a reasonable likelihood that the net effectiveness now appears to be below the minimum required, the FDA should immediately revoke their EUA.
  - **e)** The FDA must be prohibited from granting an EUA based on a subset of any RCT results (e.g., like <a href="here">here</a>).
  - f) The FDA's Fact Sheet for Healthcare Providers include a warning statement like: "This EUA was granted after a very limited scientific assessment of this product for this medical condition. As a result, the FDA has a low confidence level regarding the efficacy or long-term safety of this product for this condition."
  - **g)** The FDA's *Fact Sheet for Healthcare Providers* include a warning statement that this is an experimental EUA product, so it is **not** appropriate for it to be mandated.
  - **h)** The FDA should prohibit any EUA recipient from advertising that their product is "safe and effective," as neither has been scientifically adequately determined.

- **2 -** Considering that the <u>majority of US adults have at least one chronic disease</u>, as a minimum the FDA needs to meaningfully address this reality by the following:
  - **a)** A requirement that RCTs must include a representative sample of chronic illness subjects in both testing and placebo groups for products seeking EUA or Approvals.
  - b) In ALL cases where the above was **not** done, the FDA's Fact Sheet for Healthcare Providers must specifically include a warning statement (necessary for informed consent) that testing was **inadequately done** on subjects who had a wide variety of other chronic ailments, so the consequences to recipients with those conditions are unknown, and may **worsen** (including **death**) when taking this EUA product.
- **3 -** The FDA should be obligated to promptly develop and publicize regulations for *Informed Consent* regarding the public's taking of EUAs. These should be comparable to the FDA's informed consent conditions for clinical trial subjects (which includes many pages of conditions and caveats: see <a href="here">here</a>). **EUA product recipients should effectively be considered to be clinical trial subjects.**
- **4 -** Regarding off-label use (particularly in an emergency), the FDA should:
  - a) Allow medical practitioners to prescribe an off-label therapeutic for any condition, when the medical practitioner believes that there is reasonable scientific evidence of efficacy. (Note: *The FDA's website* states that this is already the case, but the COVID-19 situation e.g., with IVM and HCQ indicates otherwise.)
  - **b)** Be prohibited from identifying an off-label therapeutic as **not acceptable** for a medical practitioner to prescribe for a condition, where the medical practitioner determines that there is reasonable scientific evidence of safety and effectiveness. (*This misleading FDA webpage convolutes self-medicating and/or humans using veterinary products [never advisable], with a medical practitioner prescribing IVM.)*
  - **c)** Establish an EUA procedure for repurposed (esp. non-patented) pharmaceuticals, where they temporarily receive the FDA's conditional blessing, while more comprehensive scientific testing is conducted. Not doing this would appear to be contrary to this <u>statutory directive</u>.
  - **d)** Have sizable funds specifically allocated and available to quickly pay for independent RCT testing of off-label options that have reasonable scientific evidence of their effectiveness and safety for a repurposed medical use. (See <u>21 USC Chapter 9</u>, <u>Subchapter V: §355g. Utilizing real-world evidence</u>.)
  - **e)** Have a Consumer Advocate who does nothing but promote non-patented, repurposed drugs to the FDA for review (especially in an emergency).