

**White Paper: Expanding Access to Covid-19 Convalescent Plasma using Incentives**  
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Covid-19 Convalescent Plasma can be used directly as a therapeutic agent or as a raw material for hyperimmune globulins (HiG), which may be effective for treatment or for passive immunity. We propose two incentive schemes to expand the supply of Covid-19 Convalescent Plasma.

- 1) Under the first incentive scheme (“**pay-it-backward**”) a donor is awarded with a number of *community* credits each time he or she donates convalescent plasma. Accumulated credits can be used by family members of the donor for priority access to either convalescent plasma if they need it for their treatment or for HiG which can be used either for their treatment or prophylactically as a short-term vaccine. The community credit can be awarded in a tiered manner to encourage continuity of donation. For example, prophylactic access can be awarded only after a certain number of donations.
- 2) Under the second incentive scheme (“**pay-it-forward**”), a patient priority obtains priority for a plasma product if she *pledges* to return the favor back and donate in the near future, once she recovers and eligible for donation.

FAQs

- 1) Isn't there already enough convalescent plasma in the US for transfusions?

Currently, the best estimates suggest that Covid-19 convalescent plasma for treatment appears to be enough for transfusions in the United States. However, there are several other uses for plasma for treatment including hyper immune globulin (HiG) and other potential therapies and vaccine alternatives. Medical experts forecast on-going need for convalescent plasma.

- 2) Would the heightened priority for allocation of plasma products based on credits need to override clinical judgements?

No. The credit provides heightened priority for the plasma product, but its administration is subject to clinical judgement of healthcare providers.

- 3) Doesn't giving a community credit raise the question of creating a “market” for plasma?

The largest source of COVID-19 convalescent plasma is from voluntary donation. Currently, the [Covid Plasma Initiative](#) is responsible for more than half of total convalescent plasma in the United States. These donations have not been based on financial motives. Instead, a motivation is to contribute to the community. The community credit we propose would honor the contributions of donors.

- 4) Is a community credit the same thing as directed donation?

No. While some plasma donation centers have allowed for directed donation, including initially the NY Blood Center and groups like OneBlood in Florida, our pay-it-backward proposal does not direct a plasma donation to a specific patient. Rather, the community credit translates to heightened priority for a plasma product in the future.

5) Doesn't the pay-it-backward idea violate FDA rules?

Though we are not experts on FDA rules, there is a precedent for the pay-it-backward program from Blood Assurance programs, where patients obtain credits for donating blood. These credits can come in the form of future units of blood products for family members or defraying the costs of obtaining blood products. Since convalescent plasma is a blood product, we expect the same rules to apply.

6) Has the pay-it-forward rule system been used elsewhere?

Many recipients of convalescent plasma are happy to donate once they recover. The pledge simply establishes an expectation that such a patient will be contacted in the event of recovery. It is therefore a milder version of the “no give, no take” rule for organ donation used in Israel. In that system, if a patient does not sign their organ donation card, that patient is at the back of queue if she ever needs an organ donation. Our idea is milder because the pledge can be done at the time of need (and not before as in “no give, no take” rule).

Additional details:

- Who can receive the pay-it-backward community credit? One possibility is those who are eligible to receive living solid organ donation by law.
- How to prohibit sales of the community credit? The community credit cannot be sold because it can only be redeemed by qualified people.
- For pay-it-forward incentive, the pledge can be for a single or multiple donations. The latter will increase overall supply.
- Not all patients will be eligible to donate, but because each donor provides multiple donations and multiple units per donation, the expected return of this incentive will likely be very high. For non-directed kidney chains, a similar pay-it-forward idea is currently in practice, and renegeing is very low (only 6 out of 1,700 donors renege).
- More details are in: Kominers, Pathak, Sönmez and Ünver, [Paying It Backward and Forward: Expanding Access to Convalescent Plasma Therapy Through Market Design](#), NBER working paper 27143, May 2020.

**Background:** We are a team of economists who teach at MIT and Boston College, who study market design. Pathak received the 2018 [John Bates Clark Medal](#) as the top American economist under age 40. He directs the NBER's Market Design Working Group, a group of over 50 academic economists around the United States who study practical resource allocation mechanisms. Sönmez and Ünver pioneered the market design approach to [kidney exchange](#). They set up the first organized kidney exchange clearinghouse in the world in 2004 (the New England Program for Kidney Exchange), and they have supported several others including the Alliance for Paired Donation. Pathak and Sönmez pioneered reform of school choice algorithms in several U.S. cities including [New York](#), Boston, and Chicago. Pathak and Sönmez currently are in the process of reforming the United States Military Academy and ROTC cadet branch assignment algorithm. The work that Pathak, Sönmez and Ünver have done in the last two decades were prominently mentioned as part of the 2012 [Nobel Prize in Economics](#), including in its conclusion.