



# Transplant Update

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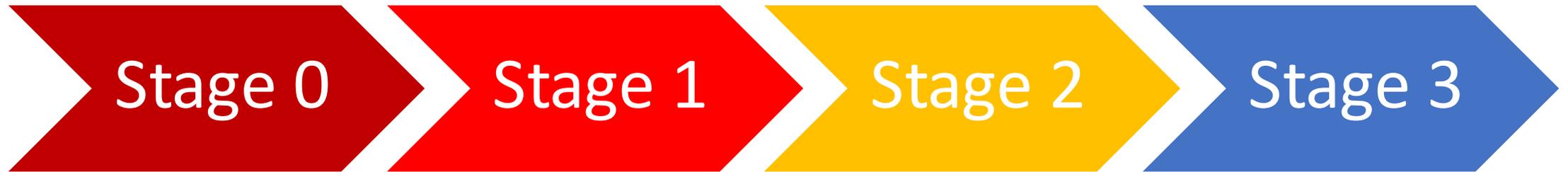
# COVID impact on transplant patients and activities

- Suspension of national KPD program on March 15, 2020
- Suspension of LDKT nation-wide on March 18, 2020
- Modified selection of DDKT on March 18, 2020 nationwide
- >90% virtual ambulatory post transplant care
- Virtual ambulatory pre-transplant assessments continued
- Work with CBS/CST/Health Canada to develop provincial and national consensus on donation and transplantation practices during COVID
- Work with BCT to provide support and education to prevalent transplant population
- "COVID clinics" to virtually assess and triage transplant PUI
- Weekly meetings with regional reps to discuss COVID and non-COVID issues/patients

# COVID cases in transplant recipients

- 44 post transplant patients at VCH/SPH with potential COVID symptoms
  - 27 patients tested for COVID
    - 4 tested positive (2 deaths; 2 discharges)
    - 1 presumed COVID despite negative test (in hospital)
  - 6 COVID negative patients admitted to hospital (2 in ICU)
  - 1 unwitnessed death (felt to be unrelated to COVID)

# COVID Response timeline



Stage	COVID Status	Transplant activity
0	Community spread exists, growing number of active cases	LDKT suspended Selected DDKT (priority and HSP)
1	Community spread exists, stable number of active cases	
2	Low number of active cases and low community spread	
3	Virus eradicated/vaccine/effective treatment	

# Guiding principles

- Kidney transplantation is life prolonging - benefits must outweigh current state
- Risks and benefits considered in the context COVID community spread
- Rapid availability (i.e. <24hours) COVID-19 PCR testing
- Allocation Policy Suspension/Modification may be required
- “COVID-19 free” pathway of Hospital-based In-Patient and Out-patient care is required
- Virtual care will be required post transplant
- System and hospital capacity for required beds, staff, and universal Personal Protective Equipment (PPE) is required
- Monitoring of processes and unintended consequences is required

# Deceased Organ Donation

<b>Stage 0</b>	<ul style="list-style-type: none"> <li>• NDD SCD (Rationale: minimize risk of DGF)</li> <li>• DCD SCD considered on a case by case basis</li> <li>• No AKI (Rationale: minimize risk of DGF)</li> <li>• No high risk travel history (travel outside Canada in last 14 days as an absolute exclusion and travel outside of BC as a relative contraindication)</li> <li>• <i>No history of symptoms suggestive of COVID</i></li> <li>• <i>No direct contact with a known or suspected COVID case</i></li> <li>• <i>No known COVID diagnosis in the last 28 days</i></li> <li>• <i>No risk of nosocomial transmission from unit the donor was located in</i></li> <li>• <i>2 negative COVID swabs (lower respiratory tract specimen necessary – either deep ETT suction or BAL)</i></li> <li>• <i>No findings suggestive of COVID on CT chest</i></li> </ul>
<b>Stage 1</b>	<b>As in Stage 0</b>
<b>Stage 2</b>	<b>As in Stage 0</b> <b>Consider DCD and ECD</b>
<b>Stage 3</b>	<b>All donors considered</b>

## Rationale

Avoid donor derived COVID

Minimize exposure to HD units

# Estimating Recipient Risk

	Medical and Surgical	Psychosocial
<b>1 = Low Risk</b>	<ol style="list-style-type: none"> <li>Age &lt; 65</li> <li>Non-diabetic ESRD</li> <li>Diabetic ESRD if low risk CAD and testing up to date</li> <li>No CAD/PVD/CVA disease</li> <li>No chronic pulmonary disease</li> <li>Primary transplant</li> <li>No active health issues within 1 yr</li> <li>Robust exertional capacity (i.e. no functional restriction)</li> <li>No history of recurrent infection</li> <li>BMI &lt; 35</li> <li>Not on anticoagulation (ASA ok) or high thrombosis risk</li> <li>No DSA</li> <li>No requirement for lymphocyte depletion or complement blockade</li> </ol>	<ol style="list-style-type: none"> <li>Established low risk plan** for transportation to hospital</li> <li>Does not live in congregate setting</li> <li>Established social supports</li> <li>Stable housing</li> <li>No active substance use</li> <li>No active mental health issues</li> <li>Compliant and motivated</li> </ol>
<b>2 = Int Risk</b>	Characteristics between low and high risk	Characteristics between low and high risk
<b>3 = High Risk</b>	<ol style="list-style-type: none"> <li>Significant CAD/PVD/CVA history or event within 1 yr</li> <li>Frail (need assistance with ADLs/IADLs)</li> <li>Poor exertional capacity (limited to walking &lt; 2 blocks or walking indoors)</li> <li>Poor cognition/memory – risk of delirium</li> <li>Poorly controlled chronic conditions (i.e DM, COPD)</li> <li>Unresolved active medical issues</li> <li>Recurrent hospitalizations within 1 yr</li> <li>Morbid obesity (BMI &gt; 40)</li> <li>Complicated abdomen/vasculature for graft implantation</li> <li>Bridging anticoagulation required</li> </ol>	<ol style="list-style-type: none"> <li>Unstable living situation/housing</li> <li>No established plan for transportation</li> <li>Substance abuse history with recent use, no rehab</li> <li>Unstable Mental Health in past year, or ongoing</li> <li>Non-adherence concerns</li> </ol>

## Key principle:

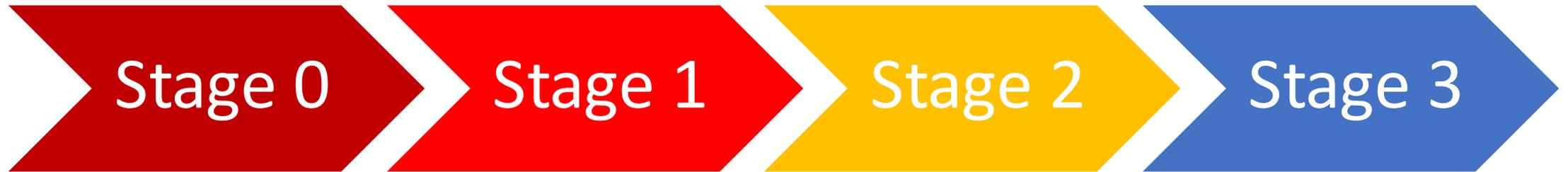
Stratify patients to easily assess risk for post-op complications and prolonged hospitalizations

# Recipient candidacy and organ allocation

<b>Stage 0</b>	<b>Medically urgent and highly sensitized candidates with a cPRA <math>\geq</math> 99% will be considered for transplantation. All other candidates considered on a case by case basis.</b>
<b>Stage 1</b>	<b>Candidates with an RCS = 1 will be considered for transplantation. (RCS &gt; 1 considered on a case by case basis)</b>
<b>Stage 2</b>	<b>Candidates with an RCS 1 and 2 will be considered for transplantation. (RCS &gt; 2 considered on a case by case basis)</b>
<b>Stage 3</b>	<b>All candidates will be considered for transplantation.</b>



# COVID Response timeline



Stage	COVID Status	Transplant activity
0	Community spread exists, growing number of active cases	LDKT suspended Selected DDKT (priority and HSP)
1	Community spread exists, stable number of active cases	Selected LDKT Selected DDKT (priority, HSP, RCS =1)
2	Low number of active cases and low community spread	Selected LDKT Selected DDKT (priority, HSP, RCS =1,2)
3	Virus eradicated/vaccine/effective treatment	All LDKT All DDKT



# Process Changes

- Living donors and recipients self isolate 14 days prior to OR
- COVID swab prior to OR
- Shortened hospital stay when possible
- Enhanced virtual follow-up