<table>
<thead>
<tr>
<th>Procedures</th>
<th>Intra-thoracic, Intra-peritoneal (open), Supra-inguinal Vascular, Major Joint Replacement</th>
<th>May also be used for other selected patients.</th>
</tr>
</thead>
</table>
| Inclusion Criteria | • Known CAD (angina, MI, positive ETT or cath)  
Or  
• Any 2 of: Age > 65, HTN, Current smoker, Total Cholesterol > 240, Diabetes mellitus | If patient meets inclusion and exclusion criteria, consider Clonidine 0.2 mg po night before and am of surgery and Clonidine TTS 0.1mg am of surgery. Dexmedetomidine (Precedex) 0.2-0.7 mcg/kg/hr in a monitored setting may also be used. |
| Exclusion Criteria | • Asthma (inhaler > 1 per week or on steroids)  
• COPD + bronchospasm  
• Heart Rate (HR) < 55 beats per minute  
• Systolic Blood Pressure (SBP) < 100 mm Hg  
• Second or third degree AV block without pacemaker  
• Active CHF  
• History of adverse reaction to beta-blocker  
• Hypovolemia or sepsis | |
| Preop | Outpatient po metoprolol:  
• HR > 70 – 50 mg bid  
• HR 55-70 – 25 mg bid  
Or current dose of beta-blocker | Beta blocker protocol annotation on surgery schedule and sticker on chart. |
| Holding Area | Anesthesiologist reviews and confirms criteria for inclusion in protocol | |
| OR | 1. **Hemodynamically stable**: Begin IV metoprolol 1-5 mg IVP prn  
2. **Hemodynamically unstable**: Esmolol bolus 10-20 mg IVP prn or continuous infusion  
3. **Hypertension**: Labetalol 5-10 mg IVP prn | Target heart rate <70 bpm |
| PACU | 1. **HR > 75 bpm AND SBP> 100 mmHg**: Metoprolol 5mg IVP over 5”, VS after 15 min, repeat X 2 if still meets criteria.  
2. **HR 65-75 bpm AND SBP > 100 mmHg**: Metoprolol 2.5mg IVP over 5”, VS after 15 min, repeat X 2 if still meets criteria.  
3. **HR < 65 bpm AND/OR SBP < 100 mmHg**: Hold | -If patient NPO, send to monitored bed.  
-Anesthesiologist activates order set. To be renewed within 24 hours by attending physician.  
-Anesthesiologist or surgeon notifies attending patient will be on protocol.  
-After PACU, attending is responsible for maintaining protocol. |
| Inpatient Unit | 1. **IV Metoprolol - NPO**: Needs monitored bed. Continue IV dosing as in PACU q 6 hours.  
2. **PO Metoprolol**:  
• HR > 75 bpm AND SBP > 100 mmHg: 50 mg bid  
• HR 65-75 bpm AND SBP > 100 mmHg: 25 mg bid  
• HR < 65 bpm AND/OR SBP < 100 mmHg: Hold  
3. **Resume po dose of other beta-blocker** | Continue for 7 days post-operatively |
| Discharge | Consider outpatient treatment for 30 days or chronically based on attending or specialist recommendation. | |