Clinical Topics on the Horizon

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Learning Objectives

At the conclusion of this knowledge-based activity, the participant should be able to:

1. Discuss upcoming innovations in the healthcare industry.
2. Recognize pertinent and quick resources to stay up-to-date with guideline recommendations.
Road Map
Clinical Topics on the Horizon

① Pharma’s New Strategic Partner
② Opioid Crisis: Opportunities to Learn More
③ Gout, gout, and more gout...
④ Resources for Staying Current...

Pharma’s New Strategic Partner
Clinical Topics on the Horizon

Why a Drug Company Is Selling Patents to a Native American Tribe
Ryan F. Mastebbaum
BOOT CAMP — Filed to: BORING STORIES
Controversy:

- **Allergan**: Sold the patent for its medication Restasis to the St. Regis Mohawk Tribe in Upstate New York. The tribe will exclusively license the drug back to the company, saving the potentially vulnerable patent from the competition of generic drug makers.

- **Tribal sovereign immunity**: Immunity from facing civil lawsuits.

- Restasis’ patent was additionally already set to expire in 2014, but was extended to 2024.

Road Map

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1. Pharma’s New Strategic Partner
2. **Opioid Crisis: Opportunities to Learn More**
3. Gout, gout, and more gout...
4. Resources for Staying Current...
Roughly 21 to 29 percent of patients prescribed opioids for chronic pain misuse them.

Between 8 and 12 percent develop an opioid use disorder.

An estimated 4 to 6 percent who misuse prescription opioids transition to heroin.

About 80 percent of people who use heroin first misused prescription opioids.

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All Opioid Deaths in Virginia, Prescription and Illicit Opioid Drugs

<table>
<thead>
<tr>
<th>Year</th>
<th>Opioid Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>515</td>
</tr>
<tr>
<td>2008</td>
<td>538</td>
</tr>
<tr>
<td>2009</td>
<td>530</td>
</tr>
<tr>
<td>2010</td>
<td>498</td>
</tr>
<tr>
<td>2011</td>
<td>601</td>
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<tr>
<td>2012</td>
<td>572</td>
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<tr>
<td>2013</td>
<td>683</td>
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<tr>
<td>2014</td>
<td>775</td>
</tr>
<tr>
<td>2015</td>
<td>811</td>
</tr>
<tr>
<td>2016*</td>
<td>1,133</td>
</tr>
</tbody>
</table>

*2016 data is not final

Source: Virginia Department of Health Office of the Chief Medical Examiner
Opioid Crisis: Opportunities to Learn More
Clinical Topics on the Horizon

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https://www.cdc.gov/mmwr
Opioid Crisis: Opportunities to Learn More

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Relationship of hyperuricemia with renal disease

UA is primarily excreted as well as reabsorbed in the kidney...

- Hyperuricemia is merely a result of slowly progressive CKD vs.
- Hyperuricemia as a cause of CKD
Comparative effectiveness of allopurinol versus febuxostat for preventing incident renal disease in older adults: an analysis of Medicare claims data

Jasvinder A Singh, 1,2,3 John D Cleveland 2

ABSTRACT
Objective To assess the comparative effectiveness of allopurinol versus febuxostat for preventing incident renal disease in elderly.
Methods In a retrospective cohort study using 2006–2012 Medicare claims data, we included patients newly treated with allopurinol or febuxostat (baseline period of 183 days without either medication). We used 5:1 propensity-matched Cox regression analyses to compare the HR of incident renal disease with allopurinol use (and dose) versus febuxostat (reference). Sensitivity analyses included multivariable-adjusted regression models.

be causative to CKD. 6–10 Allopurinol and febuxostat, two urate-lowering therapies (ULTs), have been the focus of recent interest for their potential role in preserving renal function. 11–12 Xanthine oxidase (XO) is a form of the enzyme xanthine oxido-reductase (XOR) that generates reactive oxygen species. 13 XO catalyses the oxidation of hypoxanthine to xanthine and xanthine to uric acid. 14 Allopurinol is a purine analogue that inhibits XO, thereby lowers serum urate (sUA) and possibly reduces oxidative stress. Febuxostat is a non-purine analogue that selectively inhibits XO.

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## Resources
Clinical Topics on the Horizon

✧ **Staying Current**

- **ASCP Professional Development Center:**
  - Become a member!
- **NEJM Journal Watch:**
  - Free & Customizable
- **Pharmacist Letter:**
  - Subscription required
- **iForumRx.org**
  - Podcasts, article commentary, etc.

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### Clearance Method / Calculated Value

*Note: Program will provide guidance as to the most appropriate value based on available data and current inputs. A flashing arrow will appear near this value.*

<table>
<thead>
<tr>
<th>Method</th>
<th>Value (ml/min)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jelliffe</td>
<td>46.0</td>
<td></td>
</tr>
<tr>
<td>Jelliffe (adjusted for BSA)</td>
<td>50.8</td>
<td></td>
</tr>
<tr>
<td>Cockcroft &amp; Gault (Ideal Body Weight)</td>
<td>48.7</td>
<td></td>
</tr>
<tr>
<td>Cockcroft &amp; Gault (Adjusted BW)</td>
<td>54.2</td>
<td></td>
</tr>
<tr>
<td>Cockcroft &amp; Gault (Actual Body weight)</td>
<td>62.5</td>
<td></td>
</tr>
<tr>
<td>Cockcroft &amp; Gault (No body weight)¹</td>
<td>55.0</td>
<td></td>
</tr>
<tr>
<td>Simplified 4-variable MDRD study formula</td>
<td>75.5</td>
<td>(ml/min/1.73 m²)</td>
</tr>
</tbody>
</table>

For MDRD equation, specify race: [Non black] ²

Is the serum creatinine (Scr) currently stable: [Yes] ³
Resources
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**App: iGeriatrics**

![iGeriatrics App]

Resources
Clinical Topics on the Horizon

**App: Geriatrics at your Fingertips**

![Geriatrics at your Fingertips Book]
Resources
Clinical Topics on the Horizon

**App: Immunization Advisor**

**Apps: CHADS2**
Resources
Clinical Topics on the Horizon

Book: Biostatistics & Literature Evaluation

Thank You & Safe Travels!