Cabazitaxel vs topotecan in patients with small cell lung cancer (SCLC) with progressive disease during/after first-line treatment with platinum-based chemotherapy

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Disclosures

• TE; receipt of honoraria or consultation fees from Lilly and Genentech, husband on speakers’ bureau for Genentech
• BCC; receipt of grants/research supports from Novartis; receipt of honoraria or consultation fees from Novartis, AstraZeneca and GSK
• FAS; receipt of honoraria or consultation fees from Lilly, AstraZeneca, GSK, Novartis, Roche
• MC; employed by Sanofi
• KU, JRF, PM, RR, KNS, MW; nothing to declare
Background

- Platinum-based chemotherapy is the first-line standard of care for SCLC, but most patients experience relapse and death\textsuperscript{1}
  - Although several chemotherapy agents have demonstrated activity in SCLC, topotecan is currently the only standard for comparison in relapsed disease\textsuperscript{1}
  - Median survival time of patients with relapsed SCLC varies from 14 to 35 weeks\textsuperscript{1}
  - More effective second-line treatments are required

- Docetaxel and paclitaxel are effective first or second-line treatments in SCLC\textsuperscript{2–4}
  - Cabazitaxel is a next generation taxane with approved safety and efficacy in the second-line treatment of mCRPC and activity in other advanced solid tumors\textsuperscript{5–9}

- This study aimed to investigate the efficacy of cabazitaxel compared with topotecan in the second-line treatment of SCLC

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ARD12166: study design

- Phase II randomized open-label ARD12166 study (NCT01500720)

Locally advanced or metastatic SCLC, that had progressed during or after first-line chemotherapy

N = 179

Chemosensitive* n = 91

Chemorefractory* n = 88

Cabazitaxel, n = 45
25 mg/m² Day 1 Q3W, IV

Topotecan, n = 46
1.5 mg/m² Days 1–5 Q3W, IV

Topotecan, n = 43
1.5 mg/m² Days 1–5 Q3W, IV

Cabazitaxel, n = 45
25 mg/m² Day 1 Q3W, IV

Stratify by brain metastases and LDH level

- Primary endpoint: PFS
- Secondary endpoints: DPFR at 12 weeks, response rate, duration of response, OS, safety and HRQoL
- Other key eligibility criteria: ECOG PS ≤ 1, 1 prior chemotherapy, no prior taxane/topotecan treatment

* Chemosensitive and chemorefractory patient subgroups were assessed both together and separately. Patients were defined as those who progressed (by RECIST 1.1) (A) after ≥ 90 days (chemosensitive) or (B) during or within 90 days (chemorefractory) following the completion of first-line chemotherapy.

DPFR, disease progression-free rate; ECOG PS, Eastern Cooperative Oncology Group performance status; HRQoL, health-related quality of life; OS, overall survival; LDH, lactate dehydrogenase; PFS, progression-free survival; SCLC, small-cell lung cancer.
## Patient demographics

<table>
<thead>
<tr>
<th></th>
<th>Total population</th>
<th>Chemorefractory</th>
<th>Chemosensitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cabazitaxel (n = 90)</td>
<td>Topotecan (n = 89)</td>
<td>Cabazitaxel (n = 45)</td>
</tr>
<tr>
<td>Median age, years (range)</td>
<td>60 (37–82)</td>
<td>62 (27–80)</td>
<td>58 (37–76)</td>
</tr>
<tr>
<td>ECOG PS, n (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 1</td>
<td>90 (100)</td>
<td>88 (98.9)</td>
<td>45 (100)</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1 (1.1)</td>
<td>0</td>
</tr>
<tr>
<td>Patient subgroup, n (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemorefractory</td>
<td>45 (50.0)</td>
<td>43 (48.3)</td>
<td>N/A</td>
</tr>
<tr>
<td>Chemosensitive</td>
<td>45 (50.0)</td>
<td>46 (51.7)</td>
<td>N/A</td>
</tr>
<tr>
<td>LDH level, n (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ ULN</td>
<td>46 (51.1)</td>
<td>46 (51.7)</td>
<td>18 (40.0)</td>
</tr>
<tr>
<td>&gt; ULN</td>
<td>44 (48.9)</td>
<td>43 (48.3)</td>
<td>27 (60.0)</td>
</tr>
<tr>
<td>Brain metastases, n (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present</td>
<td>25 (27.8)</td>
<td>25 (28.1)</td>
<td>13 (28.9)</td>
</tr>
<tr>
<td>Absent</td>
<td>65 (72.2)</td>
<td>64 (71.9)</td>
<td>32 (71.1)</td>
</tr>
</tbody>
</table>

ECOG PS, Eastern Cooperative Oncology Group performance status; LDH, lactate dehydrogenase; N/A, not applicable; ULN, upper limit of normal.
## Disease characteristics

<table>
<thead>
<tr>
<th></th>
<th>Total population&lt;br&gt;(&lt;em&gt;n = 90&lt;/em&gt;)</th>
<th>Chemorefractory&lt;br&gt;(&lt;em&gt;n = 45&lt;/em&gt;)</th>
<th>Chemosensitive&lt;br&gt;(&lt;em&gt;n = 46&lt;/em&gt;)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cabazitaxel</td>
<td>Topotecan</td>
<td>Cabazitaxel</td>
</tr>
<tr>
<td><strong>Median time from initial diagnosis to study treatment, months (range)</strong>*</td>
<td>8.7 (3–56)</td>
<td>8.5 (3–36)</td>
<td>6.8 (3–56)</td>
</tr>
<tr>
<td><strong>Extent of disease at study entry, n (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metastatic</td>
<td>87 (96.7)</td>
<td>81 (91.0)</td>
<td>44 (97.8)</td>
</tr>
<tr>
<td>Locoregional</td>
<td>3 (3.3)</td>
<td>8 (9.0)</td>
<td>1 (2.2)</td>
</tr>
<tr>
<td><strong>Number of organs involved at baseline, n (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–3</td>
<td>46 (51.1)</td>
<td>35 (39.3)</td>
<td>21 (46.7)</td>
</tr>
<tr>
<td>4–5</td>
<td>38 (42.2)</td>
<td>45 (50.6)</td>
<td>19 (42.2)</td>
</tr>
<tr>
<td>6–8</td>
<td>6 (6.7)</td>
<td>9 (10.1)</td>
<td>5 (11.1)</td>
</tr>
<tr>
<td><strong>Most common sites of metastases†, %</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lungs</td>
<td>97.8</td>
<td>93.3</td>
<td>97.8</td>
</tr>
<tr>
<td>Lymph Nodes</td>
<td>84.4</td>
<td>85.4</td>
<td>86.7</td>
</tr>
<tr>
<td>Liver</td>
<td>47.8</td>
<td>50.6</td>
<td>53.3</td>
</tr>
<tr>
<td>Bone</td>
<td>31.1</td>
<td>38.2</td>
<td>40.0</td>
</tr>
<tr>
<td>Adrenal</td>
<td>26.7</td>
<td>29.2</td>
<td>17.8</td>
</tr>
</tbody>
</table>

* Total population: cabazitaxel n = 89; topotecan n = 88. Chemosensitive subgroup: cabazitaxel n = 44; topotecan n = 45; †excluding brain
## Treatment exposure

<table>
<thead>
<tr>
<th></th>
<th>Total population</th>
<th>Chemorefractory</th>
<th>Chemosensitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cabazitaxel (n = 90)</td>
<td>Topotecan (n = 89)</td>
<td>Cabazitaxel (n = 45)</td>
</tr>
<tr>
<td><strong>Median number of treatment cycles (range)</strong>*</td>
<td>2.0 (1–14)</td>
<td>4.0 (1–11)</td>
<td>2.0 (1–14)</td>
</tr>
<tr>
<td><strong>Median relative dose intensity, % (range)</strong>*</td>
<td>98.9 (61.1–103.0)</td>
<td>91.8 (57.6–104.8)</td>
<td>98.9 (72.5–101.7)</td>
</tr>
<tr>
<td><strong>Treatment discontinuations, n (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>88 (97.8)</td>
<td>87 (97.8)</td>
<td>44 (97.8)</td>
</tr>
<tr>
<td><strong>Disease progression</strong></td>
<td>70 (77.8)</td>
<td>50 (56.2)</td>
<td>38 (84.4)</td>
</tr>
<tr>
<td><strong>Adverse event</strong></td>
<td>14 (15.6)</td>
<td>24 (27.0)</td>
<td>4 (8.9)</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>3 (3.3)</td>
<td>8 (9.0)</td>
<td>1 (2.2)</td>
</tr>
<tr>
<td><strong>Patient request</strong></td>
<td>1 (1.1)</td>
<td>5 (5.6)</td>
<td>1 (2.2)</td>
</tr>
</tbody>
</table>

* Total population: cabazitaxel n = 89; topotecan n = 88. Chemosensitive subgroup: cabazitaxel n = 44; topotecan n = 45.
The primary objective of PFS improvement with cabazitaxel versus topotecan was not met.
Progression-free survival: subgroups

Chemorefractory

<table>
<thead>
<tr>
<th>Probability of PFS (%)</th>
<th>Cabazitaxel</th>
<th>Topotecan</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>90</td>
<td>80</td>
<td>70</td>
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<tr>
<td>80</td>
<td>70</td>
<td>60</td>
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<tr>
<td>70</td>
<td>60</td>
<td>50</td>
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<tr>
<td>60</td>
<td>50</td>
<td>40</td>
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<td>50</td>
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</tr>
<tr>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>30</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>20</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

Number at risk

- Cabazitaxel: 45
- Topotecan: 43

Median PFS (months)

- Cabazitaxel: 1.4
- Topotecan: 2.7

Log-rank test: 2-sided $P < 0.0001$; HR = 3.32
95% CI 1.93–5.73

Chemosensitive

<table>
<thead>
<tr>
<th>Probability of PFS (%)</th>
<th>Cabazitaxel</th>
<th>Topotecan</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>90</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>80</td>
<td>70</td>
<td>60</td>
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<tr>
<td>70</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>60</td>
<td>50</td>
<td>40</td>
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<tr>
<td>50</td>
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<td>40</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>30</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>20</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

Number at risk

- Cabazitaxel: 45
- Topotecan: 46

Median PFS (months)

- Cabazitaxel: 1.5
- Topotecan: 3.8

Log-rank test: 2-sided $P = 0.0045$; HR = 1.94
95% CI 1.22–3.08

CI, confidence interval; HR, hazard ratio; PFS, progression-free survival.
### Objective tumour response rate: ITT population

<table>
<thead>
<tr>
<th>Response, n (%)</th>
<th>Overall</th>
<th>Chemorefractory</th>
<th>Chemosensitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cabazitaxel (n = 73)</td>
<td>Topotecan (n = 79)</td>
<td>Cabazitaxel (n = 35)</td>
</tr>
<tr>
<td>Complete response</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Partial response</td>
<td>0</td>
<td>8 (10.1)</td>
<td>0</td>
</tr>
<tr>
<td>Stable disease</td>
<td>16 (21.9)</td>
<td>50 (63.3)</td>
<td>5 (14.3)</td>
</tr>
<tr>
<td>Disease progression</td>
<td>51 (69.9)</td>
<td>18 (22.8)</td>
<td>28 (80.0)</td>
</tr>
<tr>
<td>Not evaluable/missing data</td>
<td>6 (8.2)</td>
<td>3 (3.8)</td>
<td>2 (5.7)</td>
</tr>
</tbody>
</table>
Overall survival: ITT population

Median OS (months)
- Cabazitaxel: 5.2
- Topotecan: 6.8

Log-rank test: 2-sided $P = 0.0125$; HR = 1.57; 95% CI 1.10–2.25

Number at risk
- Cabazitaxel: 90
- Topotecan: 89

Probability of OS (%)

CI, confidence interval; HR, hazard ratio; ITT, intent-to-treat; OS, overall survival.
Overall survival: subgroups

### Chemorefractory

<table>
<thead>
<tr>
<th></th>
<th>Cabazitaxel</th>
<th>Topotecan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median OS (months)</td>
<td>3.4</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Log-rank test: 2-sided $P = 0.035$; HR = 1.70
95% CI 1.03–2.80

### Chemosensitive

<table>
<thead>
<tr>
<th></th>
<th>Cabazitaxel</th>
<th>Topotecan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median OS (months)</td>
<td>6.3</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Log-rank test: 2-sided $P = 0.116$; HR = 1.53
95% CI 0.90–2.62

CI, confidence interval; HR, hazard ratio; OS, overall survival.
Subgroup analysis

<table>
<thead>
<tr>
<th></th>
<th>PFS In favour of cbz</th>
<th>In favour of top</th>
<th>OS In favour of cbz</th>
<th>In favour of top</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITT adjusted</td>
<td>HR = 2.17 (1.56–3.01)</td>
<td>n = 179</td>
<td>HR = 1.57 (1.10–2.25)</td>
<td>n = 179</td>
</tr>
<tr>
<td><strong>LDH level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ ULN</td>
<td>1.94 (1.23–3.06)</td>
<td>92</td>
<td>1.18 (0.68–2.05)</td>
<td>92</td>
</tr>
<tr>
<td>&gt; ULN</td>
<td>2.31 (1.48–3.62)</td>
<td>87</td>
<td>1.84 (1.16–2.92)</td>
<td>87</td>
</tr>
<tr>
<td><strong>Brain metastasis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1.88 (1.30–2.73)</td>
<td>129</td>
<td>1.41 (0.92–2.15)</td>
<td>129</td>
</tr>
<tr>
<td>Yes</td>
<td>2.46 (1.33–4.55)</td>
<td>50</td>
<td>1.67 (0.86–3.15)</td>
<td>50</td>
</tr>
<tr>
<td><strong>Chemotherapy response</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemo-resistant/refractory</td>
<td>2.74 (1.68–4.46)</td>
<td>88</td>
<td>1.51 (0.93–2.45)</td>
<td>88</td>
</tr>
<tr>
<td>Chemosensitive</td>
<td>1.88 (1.21–2.94)</td>
<td>91</td>
<td>1.44 (0.86–2.43)</td>
<td>91</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 65</td>
<td>1.82 (1.22–2.69)</td>
<td>116</td>
<td>1.30 (0.82–2.06)</td>
<td>116</td>
</tr>
<tr>
<td>≥ 65</td>
<td>2.15 (1.26–3.69)</td>
<td>63</td>
<td>1.96 (1.12–3.44)</td>
<td>63</td>
</tr>
<tr>
<td><strong>Region of the world</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Europe</td>
<td>1.65 (0.95–2.86)</td>
<td>57</td>
<td>1.26 (0.70–2.26)</td>
<td>57</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>2.49 (1.50–4.11)</td>
<td>77</td>
<td>1.38 (0.78–2.46)</td>
<td>77</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>2.99 (1.43–6.26)</td>
<td>45</td>
<td>1.59 (0.77–3.31)</td>
<td>45</td>
</tr>
<tr>
<td><strong>Stage at diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIIB</td>
<td>1.85 (0.92–3.71)</td>
<td>40</td>
<td>0.83 (0.38–1.82)</td>
<td>40</td>
</tr>
<tr>
<td>IV</td>
<td>2.25 (1.49–3.41)</td>
<td>112</td>
<td>1.85 (1.18–2.88)</td>
<td>112</td>
</tr>
<tr>
<td><strong>Number of organs involved</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 3</td>
<td>1.30 (0.82–2.08)</td>
<td>81</td>
<td>1.02 (0.58–1.77)</td>
<td>81</td>
</tr>
<tr>
<td>≥ 4</td>
<td>2.87 (1.86–4.45)</td>
<td>98</td>
<td>2.11 (1.33–3.34)</td>
<td>98</td>
</tr>
</tbody>
</table>

Cox model for Overall stratified for brain metastases and LDH level as specified at the time of randomization. Cox models for all subgroups were run without using strata. Hazard ratios (HR) < 1 favour cabazitaxel group and > 1 favour the topotecan group.

Cbz, cabazitaxel; CI, confidence interval; ITT, intent-to-treat; OS, overall survival; PFS, progression-free survival; Top, topotecan; ULN, upper limit of normal.
Most frequently reported TEAEs regardless of relationship to study treatment: safety population

<table>
<thead>
<tr>
<th>TEAEs*</th>
<th>Cabazitaxel (n = 89)</th>
<th>Topotecan (n = 88)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All-grade</td>
<td>Grade ≥ 3</td>
</tr>
<tr>
<td>Any TEAE</td>
<td>79 (88.8)</td>
<td>52 (58.4)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>26 (29.2)</td>
<td>7 (7.9)</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>17 (19.1)</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Decreased appetite</td>
<td>16 (18.0)</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>16 (18.0)</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Nausea</td>
<td>14 (15.7)</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Asthenia</td>
<td>11 (12.4)</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>10 (11.2)</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Cough</td>
<td>10 (11.2)</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Febrile neutropenia</td>
<td>10 (11.2)</td>
<td>10 (11.2)</td>
</tr>
</tbody>
</table>

- Overall, 29 patients died as a result of TEAEs (in 10 patients, the event was listed as ‘disease progression’ or ‘death’)
  - 7 deaths were considered possibly related to study treatment†

* TEAEs in > 11% of patients (cabazitaxel group, all-grade). TEAE, treatment-emergent adverse event. Red box represents TEAE of interest.
† TEAEs leading to death and considered possibly related to treatment included neutropenic infection (n = 3), febrile neutropenia (n = 2), neutropenic sepsis (n = 1) and cardiopulmonary failure (n = 1).
Most frequently reported TEAEs regardless of relationship to study treatment: subgroups

<table>
<thead>
<tr>
<th>TEAEs*</th>
<th>Chemorefractory (n = 88)</th>
<th>Chemosensitive (n = 89)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cabazitaxel (n = 45)</td>
<td>Topotecan (n = 43)</td>
</tr>
<tr>
<td></td>
<td>All-grade</td>
<td>Grade ≥ 3</td>
</tr>
<tr>
<td>Any TEAE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fatigue</td>
<td>15 (33.3)</td>
<td>4 (8.9)</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>7 (15.6)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Decreased appetite</td>
<td>8 (17.8)</td>
<td>1 (2.2)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>7 (15.6)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Nausea</td>
<td>5 (11.1)</td>
<td>1 (2.2)</td>
</tr>
<tr>
<td>Asthenia</td>
<td>10 (22.2)</td>
<td>2 (4.4)</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>4 (8.9)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Cough</td>
<td>7 (15.6)</td>
<td>1 (2.2)</td>
</tr>
<tr>
<td>Febrile neutropenia</td>
<td>6 (13.3)</td>
<td>6 (13.3)</td>
</tr>
</tbody>
</table>

* TEAEs in > 11% of patients (cabazitaxel group, total safety population, all-grade TEAEs). TEAE, treatment-emergent adverse event. Red box represents TEAE of interest.
## Haematological abnormalities*: safety population

<table>
<thead>
<tr>
<th>Laboratory abnormality</th>
<th>Cabazitaxel (n = 88)</th>
<th>Topotecan (n = 88)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All-grade</td>
<td>Grade ≥ 3</td>
</tr>
<tr>
<td>Anaemia</td>
<td>83 (94.3)</td>
<td>3 (3.4)</td>
</tr>
<tr>
<td>Leukopenia</td>
<td>70 (79.5)</td>
<td>46 (52.3)</td>
</tr>
<tr>
<td><strong>Neutropenia</strong></td>
<td>60 (68.2)</td>
<td>50 (56.8)</td>
</tr>
<tr>
<td>Lymphopenia</td>
<td>68 (77.3)</td>
<td>34 (38.6)</td>
</tr>
<tr>
<td>Thrombocytopenia</td>
<td>52 (59.1)</td>
<td>4 (4.5)</td>
</tr>
</tbody>
</table>

## Haematological abnormalities*: subgroups

<table>
<thead>
<tr>
<th>Laboratory abnormality</th>
<th>Chemorefractory</th>
<th>Chemosensitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cabazitaxel (n = 45)</td>
<td>Topotecan (n = 43)</td>
</tr>
<tr>
<td></td>
<td>All-grade</td>
<td>Grade ≥ 3</td>
</tr>
<tr>
<td>Anaemia</td>
<td>41 (93.2)†</td>
<td>0†</td>
</tr>
<tr>
<td>Leukopenia</td>
<td>35 (79.5)†</td>
<td>22 (50.0)†</td>
</tr>
<tr>
<td><strong>Neutropenia</strong></td>
<td>28 (62.2)</td>
<td>23 (51.1)</td>
</tr>
<tr>
<td>Lymphopenia</td>
<td>38 (84.4)</td>
<td>17 (37.8)</td>
</tr>
<tr>
<td>Thrombocytopenia</td>
<td>25 (56.8)†</td>
<td>0†</td>
</tr>
</tbody>
</table>

* Based on laboratory abnormalities. † n = 44. ‡ n = 43. TEAE, treatment-emergent adverse event. Red boxes represent TEAEs of interest.
Conclusions

• In the late 1990s, randomized studies of topotecan demonstrated efficacy in the treatment of relapsed SCLC\(^1,2\)
  
  – No other agent has since shown superior clinical activity

• Cabazitaxel did not demonstrate an improved PFS vs topotecan in patients with SCLC that had progressed during or after first-line platinum-based chemotherapy

• The reported safety profile is consistent with previous cabazitaxel studies and no new safety concerns were identified\(^3-7\)

3. de Bono JS et al. Lancet 2010; 376:1147–1154;

PFS, progression-free survival; SCLC, small-cell lung cancer.
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• The authors received editorial support from Paul Scutt of MediTech Media, funded by Sanofi
Questions?
Back-up
TEAEs leading to death

- Overall 29 patients died as a result of TEAEs (in 10 patients, the event was listed as ‘disease progression’ or ‘death’)
  - 7 deaths were considered possibly related to study treatment

- TEAEs leading to death and considered possibly related to treatment included neutropenic infection (n = 3), febrile neutropenia (n = 2), neutropenic sepsis (n = 1) and cardiopulmonary failure (n = 1).

- Treatment-related TEAEs leading to death per treatment arm:
  - Cabazitaxel/chemosensitive patients: neutropenic sepsis (n = 1)
  - Cabazitaxel/chemorefractory patients: neutropenic infection (n = 2)
  - Topotecan/chemosensitive patients: febrile neutropenia (n = 1), neutropenic infection (n = 1)
  - Topotecan/chemorefractory patients: febrile neutropenia (n = 1), cardiopulmonary failure (n = 1)