## SUPPLEMENTARY TABLE AND FIGURES

Supplementary Table 1: Values of the Pearson correlation between MET and myogenic differentiation markers in RMS tumors.

	MET	MYF5	MyoD	MEF2A	myogenin	myostatin	MYH2
МЕТ		<b>R</b> = - <b>0.68</b> <i>p</i> = 0.06	<b>R = 0.87</b> <i>p</i> = 0.005	<b>R</b> = - <b>0.33</b> <i>p</i> = 0.42	<b>R</b> = - <b>0.43</b> <i>p</i> = 0.29	<b>R = 0.26</b> <i>p</i> = 0.53	R = -0.55 p = 0.16
MYF5	<b>R</b> = - <b>0.68</b> <i>p</i> = 0.06		<b>R</b> = - <b>0.58</b> <i>p</i> = 0.14	<b>R</b> = - <b>0.08</b> <i>p</i> = 0.86	<b>R = 0.16</b> <i>p</i> = 0.71	<b>R = 0.02</b> <i>p</i> = 0.96	<b>R</b> = <b>0.45</b> <i>p</i> = 0.26
МуоD	<b>R = 0.87</b> <i>p</i> = 0.005	<b>R</b> = - <b>0.58</b> <i>p</i> = 0.14		<b>R</b> = - <b>0.37</b> <i>p</i> = 0.36	<b>R</b> = - <b>0.42</b> <i>p</i> = 0.30	<b>R = 0.27</b> <i>p</i> = 0.52	R = -0.39 p = 0.34
MEF2A	<b>R</b> = - <b>0.33</b> <i>p</i> = 0.42	<b>R</b> = - <b>0.08</b> <i>p</i> = 0.86	<b>R</b> = - <b>0.37</b> <i>p</i> = 0.36		<b>R = 0.92</b> <i>p</i> = 0.001	<b>R</b> = - <b>0.49</b> <i>p</i> = 0.22	<b>R</b> = <b>0.69</b> <i>p</i> = 0.06
myogenin	<b>R</b> = - <b>0.43</b> <i>p</i> = 0.29	<b>R = 0.16</b> <i>p</i> = 0.71	<b>R</b> = - <b>0.42</b> <i>p</i> = 0.30	<b>R = 0.92</b> <i>p</i> = 0.001		<b>R</b> = - <b>0.21</b> <i>p</i> = 0.62	<b>R</b> = <b>0.89</b> <i>p</i> = 0.003
myostatin	<b>R = 0.26</b> <i>p</i> = 0.53	<b>R = 0.02</b> <i>p</i> = 0.96	<b>R = 0.27</b> <i>p</i> = 0.52	<b>R</b> = - <b>0.49</b> <i>p</i> = 0.22	<b>R</b> = - <b>0.21</b> <i>p</i> = 0.62		<b>R = 0.0005</b> <i>p</i> = 0.99
MYH2	<b>R</b> = - <b>0.55</b> <i>p</i> = 0.16	<b>R = 0.45</b> <i>p</i> = 0.26	R = -0.39 p = 0.34	R = 0.69 p = 0.06	R = 0.89 p = 0.003	R = 0.0005 p = 0.99	

Expression of genes was evaluated by qPCR in paraffin-embedded RMS specimens, n = 8, R = correlation coefficient, p < 0.05 considered as significant.



Supplementary Figure 1: Myostatin and MEF2A are slightly upregulated in SMS-CTR cells cultured in DMEM with 2% HS. Expression of myostatin, myogenin and MEF2A was evaluated by qPCR in samples from SMS-CTR cells, n = 2. Data in graphs are represented as mean +/– SEM.



Supplementary Figure 2: The effects of TPR-MET are independent of myomiRs action. Expression of miR-1, miR-206, miR-133a-3p, miR-133a-5p and miR-133b was estimated by quantitative PCR in tumors formed by SMS-CTR cells after subcutaneous implantation to NOD-SCID mice, n = 4-5 (A) and in SMS-CTR cells *in vitro*, n = 2 (B) Data in graphs are represented as mean +/- SEM.



**Supplementary Figure 3: Necrosis in tumors formed by SMS-CTR cells expressing TPR-MET.** Representative images of tumors sections stained with hematoxylin-eosin show necrotic areas in TPR-MET tumors, which are indicated with arrows.