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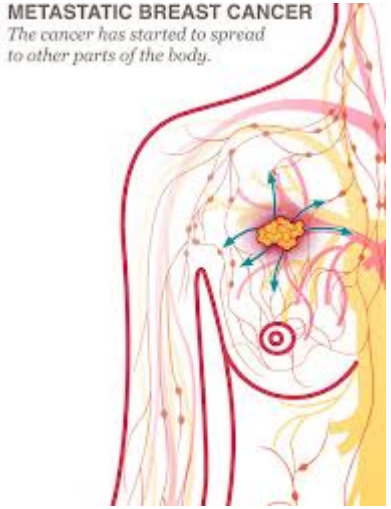
Hypoxia-inducible factor 1 and breast cancer metastasis

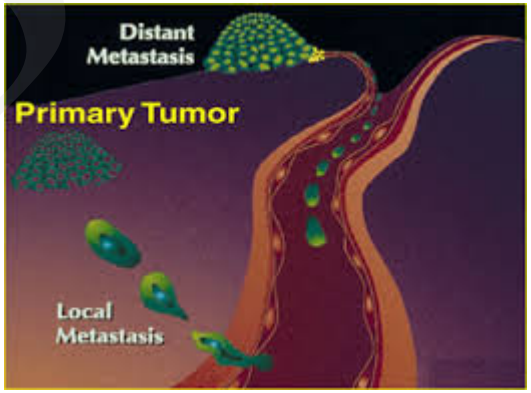
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Key words: breast cancer, hypoxia-inducible factor 1(HIF-1), metastasis

Research Summary

This review mainly focused on the roles of HIF-1 in regulating breast cancer cell metastasis, specifically its effects on multiple key steps of metastasis:





- **EMT**
- **Invasion**
- **Extravasation**
- **Metastatic niche formation**

HIF-1-regulated non-coding RNAs in breast cancer metastasis was discussed as well.

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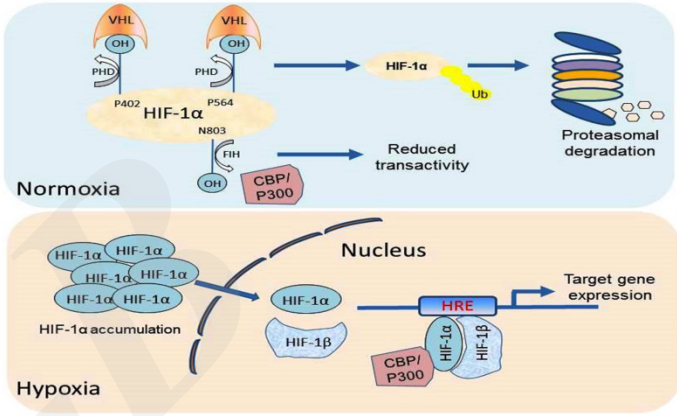
Innovation points

- **Introduction** of Basic Biology of HIF-1 and the roles of hypoxia environment in breast cancer progression.

- **Summary** of the most updated research progress about HIF-1 in breast cancer metastasis and non-coding RNAs involved.

- **Emphasis** of the therapeutic opportunities for breast cancer through targeting the HIF-1 pathway

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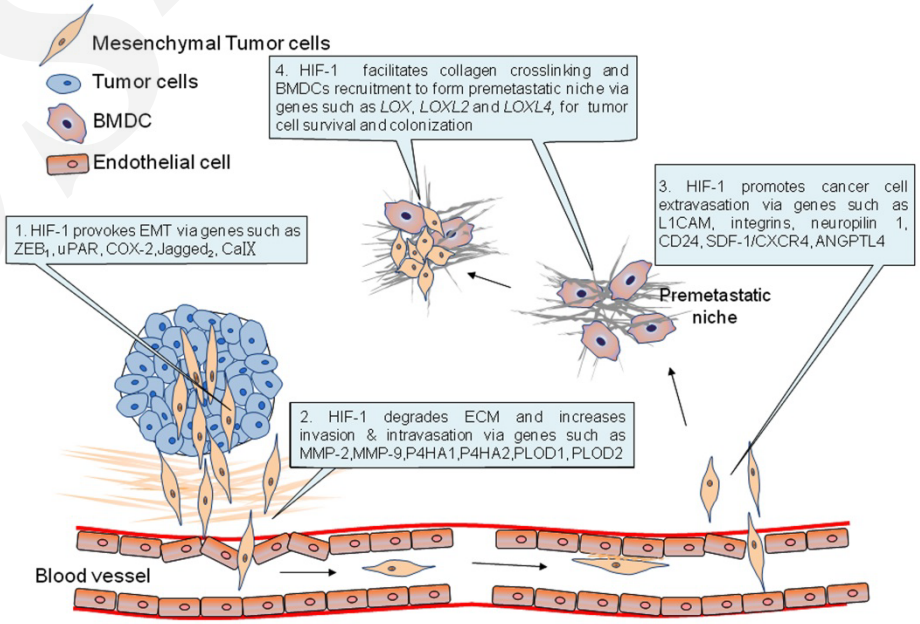


Figure 2

Innovation points

A series of comprehensive tables and figures were generated to summarize the latest knowledge about Hypoxia-inducible factor-1 mediates breast cancer metastasis.

Table 1 | Examples of the hypoxia/HIF-1 regulated ncRNAs in cancer metastasis.

Table 2 | Inhibitors of HIF-1 pathway.

Figure 1. HIF-1 is regulated by oxygen tension.

Figure 2. Cancer metastasis regulated by HIF-1.

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